DOCUMENT RESUME

ED 139 989 08 CE 011 061

AUTHOR Nolan, Richard D.
TITLE Penetrating School Strata through Career Education. Final Report.
INSTITUTION Bristol Public Schools, Conn.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
BUREAU NO V361170
PUB DATE Jun 76
GRANT OEG-0-73-5301
NOTE 276p.; For related documents see ED 107 935 and ED 109 299-300

EDRS PRICE MF-$0.83 HC-$15.39 Plus Postage.
DESCRIPTORS *Career Education; Career Exploration; Curriculum Development; Curriculum Guides; Demonstration Projects; Depressed Areas(Geographic); *Elementary School Curriculum; Elementary Secondary Education; Employment Opportunities; Fused Curriculum; *High School Curriculum; *Job Placement; Program Evaluation; *Resource Centers; School Community Cooperation; Sex Role; Sex Stereotypes
IDENTIFIERS Connecticut

ABSTRACT

This is a final report of a 3-year project to modify the curriculum in the Bristol, Connecticut, school system by infusing career education concepts and practices into all subjects at all grade levels. The report includes a description of the four components of the project: Grades K-8, grades 9-12, development of job placement services, and establishment of a resource center on career education. The description covers background, objectives, design, and results of the study. Another section deals with conclusions, implications, and recommendations. Almost one-half of the document is devoted to a third party evaluator report prepared by New Educational Directions, Inc. The evaluator report includes an overview of the project, suggestions for other funded programs, comments about the fulfillment of objectives for the four components of the study, and evaluation of the procedures followed during the project. Appendixes to the evaluator report include newspaper clippings and correspondence about the project, questionnaires, and the results of surveys of the community, principals, staff, and teachers. Attachments make up another large part of the document and include a sample curriculum guide entitled "Reducing Sex-Role Stereotyping Through Career Education" and other documents and brochures related to the four components of the study. (LMS)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED139989

FINAL REPORT

Project No. V361170
Grant No. OEG-0-73-5301

Penetrating School Strata Through Career Education

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Richard D. Nolan
Bristol Board of Education
985 Farmington Avenue
Bristol, Connecticut 06010

June, 1976

CE 011 061

TABLE OF CONTENTS

SUMMARY OF THE REPORT	Page 1
BODY OF THE REPORT	Page 6
1. Original Problem	Page 7
2. Project Goals and Objectives	Page 9
3. Project Design and Process	Page 12
4. Project Results and Accomplishments	Page 19
THIRD PARTY EVALUATOR REPORT	Page 27
CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS	Page 28
ATTACHMENTS	Page 35

Summary of the Report

July 1, 1973 to June 30, 1976

SUMMARY

I. Period Covered: From July 1, 1973 - June 30, 1976

II. Project Goals and Objectives:

A. Goal

The Bristol Public School System has been conducting a three year project entitled, Penetrating School Strata Through Career Education. This program was funded by the United States Office of Education under Part D of Public Law 90-576. Its major goal was to modify the curriculum of the school district so that all students could become better prepared for the world of work. The project was to do this through "infusing" career education concepts and practices into all subjects. Once prepared, students were to have practical experience and/or training opportunities designed to better prepare them for job entry. To do these activities, a wide variety of resources were to be secured and utilized.

B. Grades K--8 Objectives (Original)

1. To enable students to develop a more positive self-concept and greater understanding of self.
2. To enable each child to display an understanding of the relationship between his own abilities and limitations in terms of the world of work.
3. To develop and expand the pupil's knowledge about a variety of clusters of occupations.
4. To give teachers knowledge of career education concepts, career awareness, career exploration, career preparation, clusters and self-awareness techniques.
5. To implement curriculum patterns that will illustrate the relationship of school subjects to the world of work.
6. To provide for continuous development, revision and evaluation.
7. To enable students to have access and greater understanding of the many community resources available for them.

C. Grades 9-12 Objectives (Original)

1. To provide each student with opportunities, regardless of his/her ultimate career goals, to have marketable skills that will enable him to enter the labor force when the need desire arise for him to do so.

2. To enable each student who desired to undertake advanced preparation, whether it be in a post-secondary technical school, college, university or business school, to be so equipped with the necessary prerequisites to understand this advanced training.
3. To provide opportunities for students to participate in meaningful occupational explorations.
4. To provide greater encouragement for student enrollment in vocational education programs.
5. To provide greater encouragement for student enrollment in work experience programs and a wide range of work experiences.
6. To provide intensive guidance and counseling in preparation for employment and/or future education.
7. To develop career information programs to be carried out by departments within the scope of the curriculum.
8. To establish a continuing avenue of communications between school, business, industry and community.
9. To follow-up all drop-outs and graduates and to use such data in the planning of future programs.

D. Objectives of the Placement Component (Project Developed)

1. To locate and isolate significant career job opportunities in the community which can be offered to exiting Bristol students.
2. To offer such job opportunities to said students through a system which allows for clear and precise communications between employers, students and concerned education officials.
3. To utilize information retrieval forms which permit a matching of student interest and abilities with job specifications.
4. To develop processes which allow for the rapid identification of exiting students who would be interested in using this placement service.
5. To provide for the following systems within this placement service:
   a) Reporting
   b) Referral
   c) Follow-up analysis
   d) Program revision

E. Resource Center Objectives (Project Developed)

1. To serve as a dependable source of supply for the career education specialists and others availing themselves of the services of the program.

2. To satisfy their needs, whether they be for some tangible item already in the Center, for something which must be developed especially to meet their particular need or for one of the so-called "people resources" which are often the most difficult to produce.
3. To serve as a source of suggestions for both new materials and new methods which the career education specialists cannot keep abreast of on their own.
4. To serve as an on-going educational influence on those involved in the program by providing classroom teachers an understanding of what career education can offer them and their students through in-service teacher training sessions. These range from workshops designed specifically to acquaint teachers with the services of the Resource Center to those which involve participants in various activities which can be taken to the classroom and used to infuse career education into the curriculum.

III. Procedures Followed:

The procedures followed for the project were those established during the course of the first year. After researching and defining procedures to be followed for curriculum revision within the Bristol Public School System, these established procedures were implemented. Teacher involvement in any career education undertaking seemed to be the key. Teachers were asked to try to incorporate at least one of the concepts of career education into their existing lesson plans whenever possible. Each of these activities were developed with the help of the specialist at the teacher's appropriate level. Completed activities were gathered and published in seven Career Education Curriculum Guides.

IV. Results; Accomplishments:

In order to provide an overall summary account of the results and accomplishments of the Bristol Career Education Program, reference is made to the evaluator's report and the appendix showing involvement of the schools in the following categories: career speakers, field trips and exploration sites. Career education has become part of the instructional program within the identified project schools. Positive attitudes and acceptance on the part of parents, students, business community, teachers and administrators proved to be well above expectations for the project's operation.

As a result of the effectiveness of the Bristol Career Education Project, the elementary level (K-8) saw expansion to include all but five schools. The secondary level (9-12) saw no increase in the number of schools serviced, since this part of the program was totally operational during the course of the first year.

The final evidence of the project's success is the set of Career Education Curriculum Guides produced through the efforts of over three hundred fifty Bristol educators.

V. Evaluation:

A third party evaluator was secured to evaluate the project and to assess the effectiveness of each level and the overall success and value of the total project. IBEX, Incorporated of Durham, North Carolina was selected for the first two years as the third party evaluator and New Educational Directions, Incorporated (NED) for the third year. In addition, the Career Education staff was involved in an informal self evaluation of the project in an on-going basis.

VI. Conclusions and Recommendations:

As a result of the Bristol Career Education Project, it is concluded that the initial set of needs and goals on which the project was funded proved to be realistic to the local Bristol School System. The project developed a better and more meaningful educational experience for the students of the schools that made up the project sites. This involvement produced a positive base of experiences which in turn founded expertise, materials, awareness and support for the philosophies and concepts of career education.

Evidence of these results can be found in the school district's present efforts toward reorganization and program planning. We now have a Department of Vocational and Career Education as well as plans to have more organized but diverse career education programs. Most of this effort comes from local support.

Additional efforts are being made to develop additional sources of funding to extend and solidify the impact career education has made on the district.

The results indicate that such major curriculum change efforts should either concentrate project services to just the designated target schools during the funded period or allow for a longer life of funded, project activity (i.e. five to eight years).

Penetrating School Strata
Through Career Education

Final Report

Body of the Report

I. Original Problem:

In the quest to provide meaningful educational experiences in a public school educational system, many dramatic changes have occurred in techniques, content and philosophy. In today's educational institutions, nothing is more pertinent than providing every youth with the capability to make intelligent career decisions and the opportunity to prepare for entry and progress in such careers.

It has become apparent in recent years that public school education must re-identify itself and establish more efficient means for students to have greater validity in their career decisions through sensible choice rather than haphazard chance.

The original Bristol, Connecticut proposal entitled Penetrating School Strata Through Career Education, Problem Section, describes a variety of circumstances and situations which appear to have created a stagnation in the educational change process. Despite many and varied attempts to foster the development of new perspectives and curricular approaches, most of these appear to have had limited impact upon the entire system.

Frequently, old and new curricular processes appeared irrelevant to the needs of students and the community. A number of the changes developed had been remedial in design rather than prescriptive. New programs in the educational system appeared to have been geared philosophically to correcting and/or ignoring what values and skills students brought to class, rather than allowing for the diversity of these attributes.

To quote Sidney Simon, "Students, no less than adults, face problems and decisions every day of their lives. Students, too, ponder over what and how to think, believe, behave. So often what goes on in the classroom is irrelevant and remote from the real things that are going on in student's lives - their daily encounters with friends, with strangers, with peers, with authority figures; the social and academic tasks that assualt or assuage their egos. Young people are asking themselves important personal and theoretical questions that will lead them to important decisions and action."[1]

[1]Simon, Sidney, etal; Values Clarifications; Hart Publishing Company, New York, New York; 1972; page 13.

Thus, key Bristol educational administrators charged with the designing of the Career Education proposal, attempted to deal with affective components of the difficulties the system was experiencing in a "normal" curricular approach. Further, such affective elements were coupled with increased and sequential experiences with the empirical World of Work in the Project's design. To aid in this development the community itself was included in the proposal write-up as a valid place for learning experiences. Heretofore, limited use prevailed of this invaluable resource for learning. From speakers and field trips to internships and placement, the Career Education Project was to tap all possible and viable learning situations. Such community involvement was to demonstrate to each and every student that all work has dignity - if it is something enjoyed and believed in by the individual involved. The other major transfer of learning, hoped for by the proposal's design, was simply that different people enjoy different values and life styles. Therefore, identification of these varying characteristics in adults by involved youth would be of assistance in selecting a potential occupation(s). Provisions for the development of and changes in view in regard to these affective components of learning were also built into the design of the original proposal.

The document, Penetrating School Strata Through Career Education, cited two major community problems with which the school system was intimately involved. The first was that the city has been documented as an economically depressed area. Secondly, the 1970 Community Development Action Plan (CDAP) report indicated that educational expectation criteria were not keeping with the system's goal to "provide each child with an opportunity for, and motivation toward, achieving his best educational and personal goals." Both problems indicated a need for extensive changes in curriculum at all levels of education.

The Project's designers recognized the fact that curriculum revision could not occur without two crucial resources: involved teachers and banks of people and material resources to serve as instructional support for career development concepts.

Therefore, the Project was designed to have a large staff complement. There were six professional people whose prime task was to help teachers develop curricular revisions. The Career Education staff accomplished this by bringing to bear additional sets of career-oriented resources. For example, community involvement, commercially prepared career education materials and self-produced instructional materials acted as catalysts in the infusion of career education concepts with existing curricula.

Thus, the teacher enthusiasm needed to develop change in the direction of career education was fostered. Reinforcing the teacher's commitment to changes in curriculum, the proposal provided for teacher workshops and graduate college courses.

The planned curricular revision process was of unique design. Its orientation was based on the inductive concept of maximum contribution to a total end product. Teachers, in the voluntary process of trying career education concepts and resources, were to capture the essential elements of each of these activities. These recordings were then gathered, collated, organized, sequenced and related to existing curricular approaches. In this way, a "living, on-going" infusion process was built into the proposal's design.

Penetrating School Strata Through Career Education directly involved the non-public schools as well as the public sector. Additionally, cooperative ventures with a number of other educational and public service agencies had been written into the program's design.

Therefore, the proposal attempted to establish workable processes which would allow for the successful implementation of the project. To aid in the guidance and direction of staff efforts, a number of advisory groups were established and periodically called upon. The members of these groups were from a variety of backgrounds: service agencies, business and industry leaders, education, parents and concerned students.

The original Career Education proposal, Penetrating School Strata Through Career Education, summarizes the original proposal problem thusly, "it is increasingly more apparent that one of the major problems of this school system and others in Connecticut is the unrealistic expectation placed on our students, especially those whose cultural background may be deprived or lacking in stimulation." It further states that, "it is the intention of this proposal to use career education as the vehicle for a massive change of perspective in the Bristol School System.

Because of the magnitude of this undertaking, a degree of resistance to change was periodically encountered. Such situations will be described in the Conclusion Section of this report.

II. Project Goals and Objectives:

The major goal of the project was to attempt to influence existing educational concepts and practices, prevalent in Bristol schools, toward a world-of-work approach. An additional aspect of this

goal was to enhance each student's ability to make wise and appropriate career choices. Such decisions, ideally, were to be based not only on academic achievement but on other capabilities such as interest, psycho-motor development and career potential for each student's respective choice.

In order to achieve this goal, the project was conducted according to a set of specific objectives. Initially, these were broken down into two groups: the Elementary (K-8) Component and the High School (9-12) Component. As the project evolved, two other sets of objectives were developed in order to further develop two major and significant aspects of the project. The first set dealt with the Job Placement Function of the project and the second set concerned the development of the project's Career Education Resource Center.

The objectives of these four components, therefore, are as follows:

A. Elementary Component (K-8)

The major objectives of the elementary and middle school component were:

1. To enable students to develop a more positive self-concept and greater understanding of self.
2. To enable each child to display an understanding of the relationship between his own abilities and limitations in terms of the world of work.
3. To develop and expand the pupil's knowledge about a variety of clusters of occupations.
4. To give teachers knowledge of career education concepts, career awareness, career exploration, career preparation, clusters and self-awareness techniques.
5. To implement curriculum patterns that will illustrate the relationship of school subjects to the world of work.
6. To provide for continuous curriculum development, revision and evaluation.
7. To enable students to have access and greater understanding of the many community resources available to them.

B. High School Component (9-12)

The major goals and objectives of the high school component were:

1. To provide each student with opportunities, regardless of his/her ultimate career goals, to have marketable skills that will enable him to enter the labor force when the need or desire arise for him to do so.
2. To enable each student who desired to undertake advanced preparation, whether it be in a post-secondary technical

school, college, university or business school, to be so equipped with necessary prerequisites to understand this advanced training.

3. To provide opportunities for students to participate in a meaningful occupational exploration.
4. To provide greater encouragement for student enrollment in vocational education programs.
5. To provide greater encouragement for student enrollment in work experience programs and a wide range of work experience.
6. To provide intensive guidance and counseling in preparation for employment and/or future education.
7. To develop career information programs to be carried out by departments within the scope of the curriculum.
8. To establish a continuing avenue of communications between school, business, industry and community.
9. To follow-up all drop-outs and graduates and to use such data in the planning of future programs.

C. Placement Component (9-14)

1. To locate and isolate significant career job opportunities in the community which can be offered to exiting Bristol students.
2. To offer such job opportunities to said students through a system which allows for clear and precise communications between employers, students and concerned education officials.
3. To utilize information retrieval forms which permit a matching of student interest and abilities with job specifications.
4. To develop processes which allow for the rapid identification of existing students who would be interested in using this placement service.
5. To provide the following system within this placement service:
   a) Reporting
   b) Referral
   c) Follow-up analysis
   d) Program revision

D. Career Education Resource Center Component (k-12)

1. To serve as a dependable source of supply for the career education specialists and others availing themselves of the services of the program.
2. To satisfy their needs, whether they be for some tangible item already in the Center, for something which must be developed especially to meet their particular need or for the so-called "people resources" which are often the most difficult to produce.

3. To serve as a source of suggestions for both new materials and new methods which the career education specialists cannot keep abreast of on their own. These suggestions cover both commerically and locally developed career education aids as well as materials and ideas borrowed from other career education programs.
4. To serve as an on-going educational influence on those involved in the program by providing classroom teachers an understanding of what career education can offer them and their students through in-service teacher training sessions. These range from workshops designed specifically to acquaint teachers with the services of the Career Education Resource Center to those which involve participants in various activities which can be taken to the classroom and used to infuse career education into the curriculum.

III. Project Design and Process:

As indicated above, the design of the Penetrating School Strata Through Career Education project was multi-dimensional. The original goal was to modify curriculum and instructional methods to allow each affected Bristol student to formulate appropriate choices regarding future career opportunities.

In order to achieve this goal, numerous objectives were formulated both before and during the course of the project. These objectives established the operational framework from which all project activity was undertaken and evaluated. In order to achieve results in each projected area of impact, the following design was instituted:

A. Administration:

Four major functions were felt to be highly important for the management of this project. The first, and most significant, was the attempt to pre-state how this program was to fit into the Bristol School System in a comfortable, effective way. The project director was given the rank of a school principal with comparable salary remuneration. As with all project managers, this person was to report to the Director of State and Federal Programs, the chief administrator in the district for such efforts. Direction regarding curriculum infusion, hiring of personnel and other program functions was to come from the Assistant Superintendent for Instruction, the Assistant Superintendent for Personnel and the Assistant to the Superintendent for Business through the Office of State and Federal Programs.

The second major function of the project director was to successfully undertake all project reporting requirements.

Such efforts included all United States Office of Education reports, pertinent documents to the Connecticut State Department of Education and all reports required by the Bristol Public School System.

A third very significant activity for the project's administrator was to retrieve, interpret and implement advice and direction from each of several population groups serviced by the program. To do this efficiently, the project staff became part of curriculum committees and/or community advisory groups. These included:

1. The Career Education Development Committee - composed of administrative, instructional and guidance personnel.
2. The Career Education Advisory Council - composed of educators, local business personnel, parents and students.
3. The Bristol Occupational Education Advisory Board - composed of Bristol educators, business and industrial personnel, labor organization leaders, social service agency personnel and students.
4. The Ad Hoc Committee for the Development of a Master Plan for Career and Vocational Education in Connecticut - composed of state-wide leaders in the fields of education, higher education, business, industry, labor and social service organizations.

Each of these groups had a significant impact on both the development and implementation of the Career Education Project.

Finally, the project director was responsible for all day-to-day management functions of the program. These included hiring and supervision of personnel, establishing project schedules, pertinent internal communications and processing all business aspects required by the program. Fiscal records and authority, however, remained in the Office of State and Federal Programs as stipulated by the Bristol Public School System's Procedural Guidelines For Projects.

B. Career Education Staff:

Bristol's Career Education Project was designed to have a fairly large staff complement. Originally, the positions created to carry-out program objectives were as follows:

1. One Career Awareness Specialist (K-6)
2. Two Career Orientation Specialists (7-8)
3. Three Career Exploration Specialists (9-12)
4. One Career Education Resource Center Coordinator (K-12)
5. One Project Director (K-12)
6. One Project Secretary
7. One Part-Time Resource Development Aide
8. Three Part-Time Work-Study Aides

Due to the fiscal considerations, one Career Orientation Specialist position was deleted from the design after project initiation, but before all professional hiring was completed.

Professional assignments of the staff were made by their respective set of objectives and, then, by schools as follows:

1. Career Awareness Specialist (K-6): This position was responsible for the Elementary Objectives (see Part II - Section A) in the following schools: St. Ann School (300), St. Anthony School (500), St. Joseph School (350), St. Matthew School (275), St. Stanislaus School (250), Immanuel Lutheran School (300), Clarence A. Bingham School (350), Mary A. Callen School (380), Edgewood School (430), Greene Hills School (380), Ellen P. Hubbell School (425), Ivy Drive School (425), John J. Jennings School (490), Mountain View School (300), Clara T. O'Connell School (525), Thomas H. Patterson School (450), Northeast School (550), South Side School (650), Stafford School (375) and West Woods School (325). The estimated average yearly enrollment for each school has been placed in parenthesis. Obviously, this was a large group of students for one position to have to deal with. Therefore, two modifications were made to the original proposal. The first established a Career Education lead teacher in each school. This individual was provided remuneration from project funds to coordinate all project related activity in that school. Another modification was the reassignment of schools to Career Education personnel during the third year. The following reassignments occurred:
   a) Elementary Specialist (K-6) - all eleven K-6 public schools.
   b) Junior High School Specialist (7-8) - all nine K-8 schools plus one 7-8 school.
   c) One Career Education Specialist was reassigned to assist both individuals in all K-8 schools on a contingency basis. The individual fulfilling this function was certified and experienced in all levels of guidance (K-12). This realignment was possible due to this individual's original placement in the district's smallest high school.
2. Career Orientation Specialist: Initially, this position was responsible for the Elementary Objectives as described in Part II - Section A. The schools and average number of students originally established as those to receive assistance were: Memorial Boulevard School, 7-8 (800), Northeast School, 7-8 (360), Stafford School, 7-8 (200), West Woods School, 7-8 (350), St. Ann School, 7-8 (100), St.Anthony School, 7-8 (100), St. Joseph School, 7-8 (100), St. Matthew School, 7-8 (75), St. Stanislaus School, 7-8 (50) and Immanuel Lutheran School, 7-8 (50). Due to the

smaller numbers of students at this level, the lead teacher concept was implemented only in the Memorial Boulevard School. As indicated in the immediately preceding section, however, the junior high school program saw two specialists servicing teachers and students during the final year of the project.

3. Career Exploration Specialists (9-12): The three positions involved in this portion of the Career Education Project were responsible for the set of objectives indicated in Part II - Section B of this report. In that there was one specialist established for each of the district's three high schools, each of these staff members were to carry out all 9-12 objectives in their respective assignments for all interested teachers and students. These were as follows:
   a) Bristol Central High School - 1750 students, 111 faculty
   b) Bristol Eastern High School - 1850 students, 117 faculty
   c) St.Paul Cathloic High School - 1000 students, 49 faculty

   Again, due to the large numbers of students, these specialists developed lead teachers in each of the high school's several departments. Each specialist then worked with these teachers on both career education activity development and curriculum infusion. The specialists also served as liaison between the educators attempting career education concepts and the two support service programs:
   a) Career Education Resource Center
   b) Career Education Placement Coordination

   Other than one change involving the specialist serving St. Paul Catholic High School as described above, this portion of the project underwent virtually no modifications during the three years of operation.

C. Supportive Services:

As described in Part II, Bristol's Career Education Project had two major support functions built into the originally proposed objectives. Soon after the program became operational, it was apparent that these two functions were so pervasive and complex that a set of more specific objectives was necessary. Therefore, after thorough consultation with all advisory groups, Bristol administrators and the United States Office of Education, two additional sets of objectives were established:

1. The Placement Component (see Part II)
2. The Resource Center Component (see Part II)

The operation of each of these efforts is next described:

1. The Placement Component: The original proposal called for a Career Education Resource Developer. This non-professional position's responsibilities were to make extensive contacts

with people and groups in the community to develop career speakers, field trip arrangements and career exploration site arrangements. Placement of all graduates and/or post-graduates became another function after a system was developed which followed the established set of project objectives. Non-graduate placements were to be continued as the responsibility of the various high school vocational education specialists with only pertinent information provided to the placement program specialist. This was done to protect local employers from being overburdened by too many students applying for positions. As this function evolved, the placement developer's position was modified to be a full-time non-professional assignment, responsible for all non-vocational placements of students leaving the school system and those who were post-graduates in need of a job.

2. The Resource Center Component: Each of the original proposal's various objectives alluded to the need for developing a bank of resources to assist all Bristol educators in the process of career education curriculum. Such resources were to be in the form of commercially prepared activities, equipment with which to implement career education activities and human resources to augment such activities. All purchases of commercial resources (instructional supplies and equipment) were the responsibility of the Career Education Resource Center Coordinator. Such material was catalogued, stored and disseminated to the various curriculum specialists by this coordinator. All materials, when not in use, were stored and repaired (if necessary) in this Career Education Resource Center. As the project went into the third year of operation, this coordinator became responsible for two additional functions. The first was to set up Satellite Career Resource Centers in schools serving grades 7-12. The second function was to gather, collate, edit, reproduce and disseminate the Curriculum Guides for Career Education as developed by the specialists working with more than five-hundred Bristol educators. This function was augmented by an additional United States Office of Education grant from the Office of Career Education. Thus, these Career Education Curriculum Guides (K-12, Placement and Resources) have had national distribution. Throughout the project's duration, this coordinator was responsible for arranging all in-service workshop sessions for career education.

D. <u>In-Service Training</u>:

Vital to the success to any curriculum modification program is the degree of understanding for such efforts held by the concerned educators. In an effort to develop this understanding

the Bristol Career Education Project was designed to have an extensive in-service training component. Provision was made to host, minimally, two courses for graduate credit in career education. These were conducted in the Spring and Fall of 1974 by Central Connecticut State College at a Bristol location. Approximately sixty Bristol educators were involved in this effort. Other forms of training included workshops, conferences, career education specialist demonstrations, open houses and visitations to other career education programs being conducted within Connecticut and in the northeastern region of the nation. Approximately four hundred fifty Bristol educators were involved in one or more of these various efforts to promote a greater understanding of career education and/or the need for curriculum modification. A final activity of this function in the project's design was to secure information, guidance and advice from non-Bristol observers of the program. Visitors interested in similar programs, but from other school systems, became quite frequent during the second and third years. Also, other career education specialists from local, state and federal educational agencies also visited. Such individuals frequently provided helpful information regarding some aspect of Bristol's project.

E. Communications and Reproduction:

Obviously, Penetrating School Strata Through Career Education rested on the efforts of many people. Communications became a vital consideration to the program's operation. Therefore, the project was designed to accommodate the various types of interchange between the many different groups of people involved in Bristol's Career Education Program.

Administratively, the project director was responsible for all communications. These duties included all correspondence, setting up a telephone system for the specialists, public relations information, dialogue with other administrators of the system and in-depth cooperation regarding curriculum planning. As the Curriculum Guides became available, it was the project director's task to ensure that these were distributed to all teachers, principals and agencies having a need for this material.

The Career Education specialists became the catalysts for communication between the project's administrators and the system's teachers and principals. Their major goal was to have these Bristol educators develop a wide variety of career education activities which could be used in any classroom in the district. To accomplish this, extensive amounts of face to face and informal communications were necessary. Where such an interchange did not occur, there was a notable lack of project development within that school or department.

Other forms of project emphases requiring sound communications became specialized functions of the program. These included in-service training programs, graduate course development, placement functions, external site visitations and guidebook development.

F. Special Emphasis Activities:

As a direct result of Bristol's Career Education Project, a number of highly significant and related programs became possible. The most important of these, to both Bristol and the State of Connecticut, were as follows:

1. A special sex-role stereotyping project: This in-service training program was an effort to allow teachers experience in how students may be stereotyped into thinking about careers in only a traditional fashion and how to redirect such considerations. Additional funds for this effort, which also had a separate staffing component, came from the United States Office of Career Education.
2. A special dissemination project: This program, also funded with additional monies from the United States Office of Career Education, allowed the district to send the project developed curriculum guides to all State educational agencies, all school districts and colleges in Connecticut and to any school district and/or higher education institution in the country requesting them.
3. Assistance in the development of a Satellite Vocational-Technical School for Bristol: This effort allowed the career education project to conduct student and community needs assessments so that an effective curriculum could be developed by the officials responsible for this school.
4. Special assistance in the development of the Connecticut Master Plan for Vocational and Career Education: The State Department of Education was charged by the 1974 General Assembly to develop, within a two year period, such a plan. The Bristol project director sat on the original State committee to help draft this plan. As a result, Bristol's local career and vocational education plan became an exemplary model which many of the State's school districts are using to comply with provisions of the State of Connecticut Master Plan.
5. Extensive community involvement: As a result of career education efforts, large numbers of community residents and leaders became extensively involved in helping to plan, develop and implement occupational orientation and training programs. It is estimated that over five hundred such resources became participants in Bristol's educational efforts as a result of the project.

6. Establishment of a city-wide department of Career and Vocational Education: In that the district made a decision in 1975-1976 to keep effective elements of the Career Education project, a city-wide department was formed which incorporated all vocational training programs with the chosen career education efforts.

IV. Project Results and Accomplishments:

In order to provide a systematic method of reviewing the Bristol Career Education Program's results and accomplishments, the format used in Part III of this report will again be followed in Part IV. It is important to note, however, that the program's results must be reviewed in terms of its total impact on the school district. Therefore, a results summary is included which introduces the conclusion section where a thorough discussion is undertaken regarding the project's impact.

A. Administration:

1. Successful communications regarding the maintenance and operation of the project with the United States Office of Education.
2. Successful management of additional grant applications to extend the emphasis of certain elements of Career Education in Bristol. These include:
   a) Sex-role stereotyping in-service training (see Attachment A)
   b) A dissemination project to distribute, nationally, Bristol's Career Education Curriculum Guides (see Attachment B)
3. Successful management of Career Education Curriculum Guidebook development. These guides demonstrate how career education activities can be incorporated (or infused) into the various curriculum offerings of the district. Further, the guides are broken down into three areas; K-6, 7-8 and the 9-12 grade levels. These materials have been submitted to the United States Office of Education under separate cover. However, the cover page is attached to this report. (see Attachments C1, C2, C3)
4. Successful communications efforts to enable career education specialists to effectively work with more than five hundred Bristol educators in the development of the curriculum guides.
5. The management of a successful In-Service Training Program. About five hundred fifty Bristol educators benefited in some way from this effort.
6. The development of a centralized Placement Service for graduates and post-graduates of the Bristol School District.

Approximately one hundred such people participated in this aspect of the project.
(see Attachment D)

7. The participation in the development of the Connecticut Master Plan Task Force for Vocational and Career Education.
(see Attachment E)
8. The participation of the project director in a special National Advisory Council for Career Education conference development.
9. The successful implementation of a major follow-up study for graduates of the Bristol School System. The results indicated a strong need for practical career guidance for Bristol students.
10. The successful implementation of a major Needs Assessment for Vocational Education. This included sampling about three thousand 9-12 students and about one hundred businesses and industries in the district. It was determined that at least eight hundred more students could be profitably trained in a technical-vocational field as compared to the one hundred twenty presently receiving such instruction.
(see Attachment F)
11. The successful planning for the development of a distinct city-wide Department of Career and Vocational Education at the conclusion of the activity.
(see Attachment G)
12. The successful development of a special Kindergarten study regarding self-concept factor identification.
(see New Educational Directions Evaluation Report)
13. The successful development of a bank of community resources. The process for efficiently using these resources was also identified and refined. The cover page is attached to this report.
(see Attachment H)
14. The development of a highly successful career exploration program serving students in grades 7-12.
(see Attachment I)
15. Arrangement for and implementation of a successful audit for this three year project. An independent auditing firm determined that all funds were used in an appropriate fashion. This has been submitted under separate cover.

B. Career Education Staff:

1. Successfully working with over five hundred Bristol educators to develop the following products:
   a) Career Education Curriculum Guides - K-6, 7-8, 9-12
   b) Career Education Placement Service Guide
   c) Career Education Resource Guide
   d) Career Education Community Resource Information

2. Successfully designing and implementing in-service workshops for interested teachers of each specialists assigned grade level. Each specialist either led or participated in their respective set of workshops. Over fifty of these sessions were held during the project's three year period. Often, such training programs brought non-Bristol experts into the system in the following areas of concentration:
   a) Elementary Career Awareness
   b) Elementary Self-Awareness
   c) Career Orientation
   d) Placement Procedures
   e) Curriculum Infusion Concepts
3. Developing guidance outreach programs whereby counselors and teachers would team-teach classes regarding the career opportunities which might result from thoroughly understanding concepts covered by such classes. This function was especially successful at grade levels 7-12.
4. Successfully designing individualized procedures which allowed each cooperating teacher to incorporate career education activities into subject areas. This was done by matching the subject area to pertinent elements of appropriate clusters of careers. This activity was especially successful at all grade levels. Such developments included:
   a) Grade level packets of career education materials tied to specific teacher-designed activities in career education. Each packet was designed for a particular grade level and subject area.
   b) Career Resource Centers, which were satellite to the main city-wide center, were developed in twelve of the city's twenty-four schools. These satellite centers provided handy resources for teachers in their development of career education activities. Periodically, these materials would be rotated amoung the satellite centers to further stimulate teacher activity development. (see Attachment J)
   c) Over twenty different career day expositions were held in schools having seventh and eighth grades.
   d) A career speaker program which brought more than five hundred different speakers into all schools over the three year period. More than three hundred of these were for the three high schools.
   e) A career field trip program which allowed for more than two hundred fifty trips taken by teachers and students to businesses, industries, social service agencies and cultural institutions around the greater Central Connecticut region. Because such trips were always tied to in-class career education activities, more than one thousand Bristol students received intensive career orientation with this program.

f) A career exploration program which operated only in grades 7-12. This activity was immensely popular with students and teachers. An exploration was an individualized field trip each of which lasted for at least one full school day but less than three. Each student was allowed two such explorations per year. Further, the explorations had to be tied into school work and into a career education activity the student was undergoing. A complete report from the student was required for each exploration. By and large, the students made all pertinent arrangements for each exploration after the Career Education Community Aide matched and introduced the student and responsible teacher to the host. The hosts represented over three hundred different businesses, industries, social service agencies and cultural institutions in the Central Connecticut region. More than six hundred such explorations were conducted during the last two years of the project.

5. Successfully participating in several national career education conferences. These included:
   a) The Center for Occupational Study, Ohio University
   b) The American Personnel and Guidance Association National Conferences
   c) Experienced-Based Career Education Conference

   One of our career specialists, Ms. Kathleen Quinn, along with three other Bristol counselors and teachers received a national award for Guidance Outreach programs from the American Personnel and Guidance Association (refer to Part IV, Section B, Item 3 above).
6. Successfully assisting more than twenty Connecticut school districts to implement career education programs. This was done through extensive cooperation with the Capitol Region Education Council and the Connecticut State Department of Education.
7. Successfully representing the project and the school district at more than twenty-five civic presentations of career education in Bristol.

C. Support Services:

1. Placement program results were as follows:
   a) The development of a Placement Program Guide which provided specific procedures and responsibilities for the three high school specialists involved in this program. These guidelines were developed by a Placement Steering Committee. All school departments fed students through this service. A total of approximately fifty students benefited from this effort.

b) Arranging and conducting seminars for senior students whereby local business and industry sent personnel managers to provide job prospect information to these pupils.

c) Arranging and conducting seminars for junior and senior students at each of the city's three high schools regarding job application and interviewing procedures. All twelfth grade students in the district underwent this training during the second and third years of the project.

2. Career Education Resource Program: As indicated above, the Bristol Career Education Resource Center was responsible for locating, securing, cataloging and using a wide variety of resources. These included purchasing commercially developed materials, procuring project developed materials from outside the district and identifying and catagorizing available human resources. Specifically, this portion of the project was responsible for the following results and accomplishments:

a) Purchasing more than $40,000.00 worth of commercially prepared career education materials which were specifically related to teacher developed career education activities.

b) Purchasing more than $10,000.00 worth of instructional equipment for teacher use in undertaking career education activities.

c) Establishing and maintaining an efficient card file/identification system for each item purchased for or provided to the Bristol Career Education Program. This system further allowed for the rotation and/or borrowing of these materials by Bristol educators from around the school system.

d) Securing non-Bristol project curriculum guides in career education from school institutions around the nation.

e) Compiling a bibliography of all pertinent materials in career education which was distributed throughout the school district. This effort included the production and distribution of bibliographic updates.

f) Procuring, cataloging and distributing, to all high school counselors and other teachers, a complete record of labor market projections for the Bristol region, Connecticut and the nation. This information was solicited from the Connecticut State Department of Labor, the United States Department of Labor and The Occupational Outlook Handbook.

g) Developing an occupational information file which consists of information gathered from businesses, industries and professional organizations on more than two thousand different occupations. This material has also been included in the distribution system to teachers

and counselors mentioned above. A document very helpful to this process was The National Trade and Professional Associations of the United States, published by Columbia Books, Inc. of Washington, D.C.

h) Developing and distributing a Community Resource Guide which allowed Bristol educators the opportunity to tap people in the greater Bristol region to participate in the career education program. These individuals, representing more than five hundred businesses and industries, committed themselves to serve as one or more of the following resources:
   1. Field trip sites
   2. Exploration sites
   3. Career speakers

i) Performing an evaluation function for all career education activities developed locally. Each activity was edited, clarified and rated by a committee. This function served as a method to determine only appropriate activities to be included in the Career Education Curriculum Guides. This rating function was also extended to commercially prepared materials.

j) Development and production of the Bristol Career Education newsletter, The Exchange. This publication was distributed around the school system and to all other districts requesting it. The Exchange contained highlights of local and state career education activities as well as brief, succinct descriptions of new career activities which teachers could undertake. This newsletter was the recipient of national recognition from the publication, Career Education News published by McGraw-Hill Publication Company.
(see Attachment K)

k) Development of and dissemination of information regarding a professional library for career education.

l) Production, organization and adaptation to activities of slide and video tape programs in career education. Over one hundred such programs were developed to be used in conjunction with one or more career education activities.

m) Development, hosting and conducting of a wide variety of in-service training programs in career education. These included:
   1. Coordination of two college courses in career education from Central Connecticut State College which provided three graduate credits to participants. About sixty Bristol teachers participated.
   2. Coordination of visits to other career education sites by local educators. More than ten such visitations occurred affecting more than fifty counselors, teachers and administrators.

3. Coordination of visits to Bristol by other school district officials. More than fifteen systems sent representatives to Bristol to assess the career education program for their own respective districts.
4. Workshops for Bristol teachers on the following career education related topics:
   a) Commercial resources
   b) Locally developed activities
   c) Career education in other school systems
   d) Curriculum infusion methods
   e) Affective education

   All of these workshops were integrated into the school district's in-service training plan.

D. In-Service Training:

The in-service training results were, by and large, the major technique used to modify the curriculum toward a career education emphasis. Managed by the project's director and implemented by the career education resource specialist (see Sections A and C), more than five hundred fifty Bristol educators benefited from this function. This activity, in turn, allowed these people to effectively work with the career education specialists to develop the aforementioned curriculum guides. In short, in-service training became the major tool with which the project's personnel developed grass-roots material; activities directly related to the school system's curriculum.

E. Communications and Reproduction:

The communications and reproduction results were evidenced mostly by the products developed as a result of the project. These included:

1. The Bristol Career Education Curriculum Guides for grades K-6, 7-8 and 9-12.
2. The Bristol Career Education Community Resource Guide.
3. The Bristol Career Education Resource Guide; including periodic updates.
4. The Bristol Career Education Placement Program Guide.
5. Brochures depicting various major elements of Bristol Career Education. The titles of these include:
   a) Bristol Occupational Education (see Attachment L1)
   b) A Model for Grades K-12 (see Attachment L2)
   c) Jobs: Placement Service (see Attachment L3)
   d) Career Resource Center (see Attachment L4)

   Other forms of communication included letters, forms, reports, etc. In all cases an official record of these has been maintained by the school system. In addition, a record has been

maintained of all press releases (which number over one hundred) regarding career education in the district. Another form of communication record maintained by the school district are the approximate three hundred requests made by school districts and institutions from around the nation for Bristol Career Education curriculum materials.

F. Special Emphasis Results:

As both a direct and indirect result of Bristol hosting this Career Education Exemplary Project, added dividends included:

1. A Sex-Role Stereotyping Guide which was an in-service tool to demonstrate how teachers and counselors could avoid casting people and occupations into male and female categories.
2. Assistance in the development of Connecticut's first State Master Plan for Vocational and Career Education.
3. The establishment of the first city-wide Department for Vocational and Career Education.
4. Assistance in the development of a Satellite Vocational-Technical School for the greater Bristol region. This State operated institution is scheduled for opening in September, 1978.
(see Attachment M)

G. Results Summary:

As can be seen in the narrative of the report and the attachments, this project has proven to be very beneficial to the Bristol School System. In the last section, these results are thoroughly compared to the project's objectives. The impact of this program is analyzed in terms of these objectives and the district's subsequent incorporation of career education. Following these analyses, recommendations are made which may prove helpful to others contemplating such a project.

V. Third Party Evaluator Report:

BRISTOL CAREER EDUCATION PROJECT

Penetrating School Strata
Through Career Education

Funded under the provisions of Section 142 (C)
of
Part D of the Vocational Education Amendments of 1968

Grant Number OEG-0-73-5301

THIRD PARTY FINAL REPORT

JUNE, 1976

TABLE OF CONTENTS

		page
I.	Introduction	3
II.	Suggestions for Other Funded Programs	3
III.	Overview	4
IV.	BCEP's Specific Objectives	
	a. Grades K-8	7
	b. Grades 9-12	13
	c. Placement Component	17
	d. Resource Center	17
V.	Procedures	
	a. General	19
	b. K-8 Procedures	21
	c. 9-12 Procedures	22
VI.	Demonstration and Dissemination Activities	25

TABLES

I.	BCEP Staffing and Third-party Evaluators for the Duration of the Project	6
II.	Summary of May, 1976, COB Administration--Grade 3	9
III.	Summary of May, 1976, COB Administration--Grade 6	10
IV.	Summary of May, 1976, COB Administration--Grade 8	11
V.	Community Resource Utilization	14
VI.	Utilization of Primary Resources	19

APPENDICES

A NED Site Reports

B Summary of Community Survey

C Summary of Principals' Survey

D Summary of Staff Opinionnaires

E Report of Teacher Questionnaire

F Representative Newspaper Articles

G December 1, 1975, Interim Evaluation Report

H Careers Orientation Battery--Bristol Edition

I Kindergarten Study Summary Report

J Staff Logs

I. INTRODUCTION

The Bristol Career Education Project (BCEP) and New Educational Directions, Inc. (NED) have worked closely together on both the process (formative) evaluation and outcome (summative) evaluation components of the program since October 22, 1975. As a result of this close working relationship each organization has attempted, to the extent possible, not to duplicate the other's or their own efforts.

During the preparation of this report, NED received a draft copy of BCEP's final report. This draft report was reviewed by NED staff and found to be an open, honest, and succinct description of the strengths and weaknesses of the project. Therefore, this third-party report is intended to complement and supplement the project's final report.

As NED and BCEP have worked together a series of reports summarizing various facets of the evaluation have been issued as separate documents. These separate documents which focus on both process and outcome evaluation are included as appendices to this report and frequently are referenced in the body of the report. Placing these documents in appendices is in no way intended to give them "second class status." The reader is encouraged to consider the appendices as an integral basic component of this document.

II. SUGGESTIONS FOR OTHER FUNDED PROGRAMS

Based on NED's experiences with and observations of BCEP, the following suggestions are offered for the consideration of organizations who may attempt a large-scale funded career education program in the future. It must be remembered that any funded project has a very limited time to accomplish its mission so that a strict adherence to time lines is essential.

1. Establish realistic and assessable process and outcome objectives as a framework for the project.
2. Establish an evaluation design which is directly related to the project's stated objectives and gather baseline data prior to, or at the latest concurrent with, the delivery of services.
3. Salaries budgeted for all positions should be attractive enough so that the project can attract high calibre personnel without delays in the time schedule.
4. If a project is staffed with personnel from within a school district or organization, staff assigned to the project should be assured a position comparable to the one they left at the project's conclusion.

5. After project staff have been hired, regardless of their expertise, they should have an extensive common inservice experience.

6. Formal and informal lines of communication between staff, clients, and sponsors should be established, identified, and maintained. These communication lines should be conveyed to all within and outside of the project staff who will in any way be dealing with the project.

7. A project should start small and expand on the basis of its experiences rather than attempt too much too soon. To "withdraw" services once offered can do irreparable damage to a project's functioning.

8. Funded projects should convey an austere image. The "give away" image is one to be avoided as non-project staff are more apt to be interested in the "things" they can get from the project than they are in the ideas, concepts, and programmatic aspects of the project.

9. If there is not visible and concrete support from the top administration and policy makers of an organization, a project's chances for success are far less than in a situation where such such support exists. Such support must be more than permissive in nature.

III. OVERVIEW

The Bristol Career Education Project, "Penetrating School Strata Through Career Education," was funded under Part D of the Vocational Education Act in July, 1973. For the period January, 1974, through June, 1975, IBEX, Inc., acted as BCEP's third-party evaluator. On October 14, 1975, NED was informed that on the basis of a competitive bidding procedure, it had been retained to serve as the third-party evaluator for BCEP during its third year as a federally-funded project. On October 22, 1975, a NED representative made the first site visit to the project. Since that time NED staff have spent a total of twenty-five person days in Bristol and more than 200 professional hours have been devoted to BCEP activities at NED's Crawfordsville, Indiana headquarters. After each NED site visit the BCEP staff were provided with a summary of the visit in the form of a memorandum for the record. These memoranda are reproduced as Appendix A of this report.

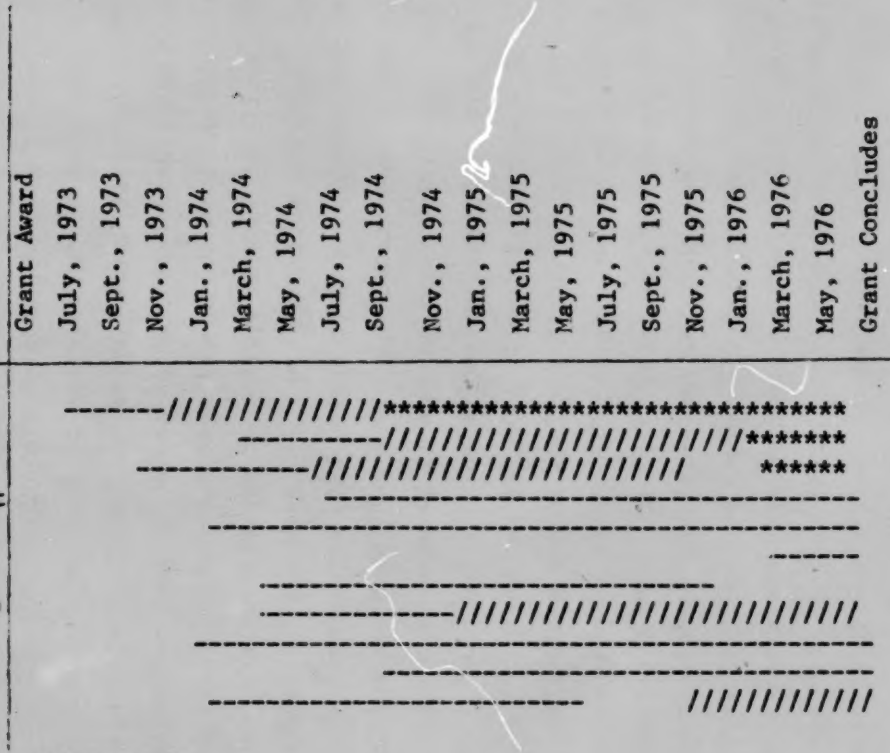
On the basis of NED's observations, of the data available, and from the reports of the former third-party evaluator, it appears that the project has had its accomplishments during its brief existance. At this point-in-time, it seems that a viable career education program is beginning to emerge in a number of Bristol's public and parochial schools and that that emerging program is directly traceable to the efforts of the BCEP staff. As yet there is little evidence concerning the impact this emerging program is having on students (see Section IV and Appendix I). BCEP apparently had a direct and positive influence on a

number of Bristol's teachers (Appendices D & E). The project did an outstanding job of gaining acceptance by Bristol's labor and management communities (Appendix B) and, on the basis of interviews and questionnaires, it appears the project also gained a very respectable level of acceptance by administrators in the Bristol schools at the building level, (Appendix A /March 29 & April 20 Memoranda/ and Appendix C). However, as of this writing and with a great deal yet to be accomplished before career education is fully implemented in Bristol, it appears that for all practical purposes the local Board of Education will not commit sufficient monies to maintain more than a slim vestige of the program by retaining the Resource Center Specialist's position when federal funding concludes June 30, 1976.

In a June 26, 1975, report of a May 1-2, 1975, visit by a team representing the USOE Region I Office it was written, "It is not too early to plan for the support, from other federal funds, of the project. Related directly to this area is the continually expressed worry of all staff that termination of the federal funds will mean the termination of the project." and " . . . third-year activities will be affected by the concerns of staff in the future for the project." In NED's first site report dated October 22, 1975, it was commented that, "There is an additional factor which is apt to have an increasingly negative impact on staff performance as the school year progresses. This factor is the insecurity of the staff not knowing whether or not they will be employed during the 1976-77 year. Positive action on the part of the central administration and/ or board of education could do much to negate this situation." In NED's April 20, 1976, site report it was stated that, "The BCEP staff is working in a milieu of uncertainty and competition which appears to be engendering a fair amount of hostility which in turn is disruptive to the overall functioning of the project." In NED's final site report dated May 22, 1976, it was noted, "The overall situation at the project and the staff feelings appear basically unchanged from those noted in my site report dated April 30." Table I below summarizes BCEP's staffing for the duration of the project. The nine major positions, seven professional, one paraprofessional, and one clerical, funded through this grant should have provided the project with 324 person months to accomplish its mission. In reality, various of these positions remained open for a total of 77 months or approximately 23.8% of the available time. It is against this background which the discussions of the BCEP's accomplishments in the remainder of this report must be interpreted.

TABLE I
BCEP STAFFING AND THIRD-PARTY EVALUATORS
FOR THE DURATION OF THE PROJECT
July 1, 1973--June 30, 1976

No. of individuals filling position	No. of months position unfilled	% of time position unfilled	
3	--	8.3	Project Directors[1]
3	8	22.2	Community Coordinators
3	8	22.2	Secretaries
1	11	30.6	Resource Center Specialist
1	6	16.6	Elementary Specialist A
1	--	--	Elementary Specialist B[2]
1	13	36.1	Junior H.S. Specialist
1	8	22.2	Senior H.S. Specialist A[3]
1	6	16.6	Senior H.S. Specialist B
1	14	38.9	Senior H.S. Specialist C
2	12	33.3	Third-party Evaluators



KEY
----First person (or organization) for role
////Second person (or organization) for role
****Third person (or organization) for role

1) = 25% time committment for first director
2) = Position replaced JHS Specialist but primarily served elementary level
3) = Also served JHS & ELEM levels--1975-76

In the original funding proposal it was stated, "It is the intention of this porposal to use career education as the vehicle for a massive change of perspective in the Bristol School System." In spite of a conscientious and hard-working project staff, there is no evidence of "a massive change of perspective" in the Bristol School System.

IV. BCEP'S SPECIFIC OBJECTIVES

a. Grades K-8

A. To enable students to develop a more positive self-concept and greater understanding of self;

AND

B. To enable each child to display an understanding of the relationship between his own abilities and limitations in terms of the world of work;

AND

C. To develop and expand the pupil's knowledge about a variety of clusters of occupations.

Student outcomes for the BCEP project were assessed at the kindergarten and grades 3, 6, and 8 levels. There are two basic approaches to the student outcome question: (a) The evaluation may attempt to determine the impact of project activities upon the "average student" in the project area. With this approach outcomes are measured for all students or a random sample of students in the district. (b) The impact of the project on students given maximum cooperation and participation of their teachers can be addressed. In this case, the "most exposed" students are identified for outcome measurement and, if possible, compared to a less exposed or unexposed group. These approaches can usually be expected to yield different results because a project staff generally has control over student activities only to the extent that they are able to influence educators to implement career education. Even if the project is able to involve all teachers in inservice activities, it is unlikely that all teachers will actually implement a maximally effective program in the classroom. NED prefers the second approach to student outcomes, as this approach yields more valid data concerning the project's recommended approach to career education implementation and it was the one which was used for these assessment activities.

The design, implementation, and outcomes of the kindergarten assessment are detailed in Appendix I but the conclusions of that study are

> . . . there is tentative evidence that career education experiences at the kindergarten level have affected children in the following ways:
> 1. A greater interest in jobs, more openness with adults, and/or a better understanding of the nature of jobs as seen in the greater tendency to ask job-related questions of a worker and an increased attentiveness to a guest speaker.
> 2. Increased ability to project themselves into a work role, as seen in the reasons for liking or disliking the job.
> 3. Increased awareness of the relationships of in-school learning to work situations.

The NED and BCEP staffs worked together on a modification (Appendix H) of the NED-developed Careers Orientation Battery (COB). The BCEP staff identified the experimental and control classes to be tested at grade levels 3, 6, and 8. Experimental classes were those classes where the staff member had worked extensively with the teacher and where, in the staff member's judgement, career-education-oriented concepts and activities had been infused into the teacher's instructional program. Comparison groups represented teachers who elected not to become involved with BCEP services but who were serving children comparable to those served by the experimental teachers.

The BCEP edition of the COB at the grade 3 level yields four scales:

Scale	Items	Scale Name	Career Education Objective
I	24	Technology	The student will understand the interrelatedness of various jobs.
II	21	Self Esteem	The student will develop a positive attitude toward him/herself.
III	16	Attitudes toward Work	The student will develop desirable work attitudes.
IV	28	World of Work	Students will be aware of the requirements for and nature of various jobs.

The COB was administered in five third-grade experimental classrooms and in three comparison classrooms during May, 1976. The results of those administrations are summarized as Table II.

TABLE II
Summary of May, 1976, COB Administration
Grade 3
Experimental (N = 111) and Comparison (N = 62) Groups

COB Scale	Mean	Standard Deviation	Difference of Means	t[1)]	Significance
I.					
Experimental	14.37	5.06		1.41	NS
Comparison	13.60	2.03	.77		
II.					
Experimental	12.59	2.64		-1.98	$p < .05$
Comparison	13.50	3.06	-.91		
III.					
Experimental	10.44	1.71		.72	NS
Comparison	10.26	1.49	.18		
IV.					
Experimental	14.18	2.62		1.94	$p < .1$
Comparison	13.35	2.72	.83		

1) two-tailed, df = 171

Differences between the mean COB scores of the experimental and comparison groups were subjected to a t - test for independent groups. Only students for whom there were a complete set of COB scores were included in the analysis. No significant differences were found between the two groups in mean measured understanding of the inter-relatedness of various jobs or in students attitudes toward work. The experimental group was more aware of the requirements for and nature of various jobs than the comparison group at the .1 level of confidence. However, the comparison groups at the grade 3 level exhibited statistically significant higher self esteem as measured by the COB at the .05 level of confidence.

At the sixth-grade level, the BCEP edition of the COB yields six scales:

Scale	Items	Scale Name	Career Education Objective
I	22	Technology	Students will understand the influence of technology on American society.
IIa	21	Self Esteem	The student will develop a positive attitude toward him/herself
IIb	19	Attitude toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
III	28	Attitudes toward Work	Students will develop desirable work attitudes.
IV	15	Decision-Making Skills	Students will develop career decision-making skills.
V	33	World of Work	Students will be aware of the requirements for and nature of various jobs.

The COB was administered to five experimental and four comparison groups at the grade 6 level during May, 1976. Differences between the mean COB scores of the experimental and comparison groups were subjected to a t - test for independent groups. Only students for whom there were a complete set of COB scores were included in the analysis. Statistically significant differences did occur on two of the scales, Self Esteem at the .1 level of confidence and Attitudes toward Work at the .05 level of confidence. On both of these scales the comparison group outperformed the experimental group.

TABLE III
Summary of May, 1976, COB Administration
Grade 6
Experimental (N = 123) and Comparison (N = 88) Groups

COB Scale	Mean	Standard Deviation	Differences of Means	t[1)]	Significance
I.					
Experimental	12.64	2.81		-.63	NS
Comparison	12.85		-.21		
IIa					
Experimental	13.25	3.12		-1.08	$p < .1$
Comparison	14.09		-.84		
IIb					
Experimental	13.31	3.43		-1.37	NS
Comparison	13.92		-.61		
III					
Experimental	17.30	3.89		-2.18	$p < .05$
Comparison	18.41		-1.11		
IV					
Experimental	8.48	1.93		.47	NS
Comparison	8.36		.12		
V					
Experimental	10.61	3.03		-1.02	NS
Comparison	11.50		-.89		

1) two-tailed, df = 209

The COB was administered to an experimental group in grade 8 at a parochial school and to grade 8 students at three comparison schools in May, 1976. A t - test for independent groups was applied to the mean differences between the experimental and the control groups for each of the COB scales which in the BCEP eighth grade edition are

Scale	Items	Scale Name	Career Education Objectives
I	19	Attitude toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
II	30	Attitude toward Work	Students will develop desirable work attitudes.
III	15	Decision-Making Skills	Students will develop career decision-making skills.
IV	44	World of Work	Students will be aware of the requirements for and nature of various jobs.

A statistically significant difference between the groups occurred on only one of the four scales. As measured by the COB, the comparison group perceived school activities as more satisfying and relevant at the .001 level of confidence. The results of the grade 8 COB administrations are summarized in Table IV.

TABLE IV
Summary of May, 1976, COB Administration
Grade 8
Experimental (N = 53) and Comparison (N = 105) Groups

Cob Scale	Mean	Standard Deviation	Differences of Means	t[1)]	Significance
I					
Experimental	11.53	3.48		-3.46	$p < .001$
Comparison	13.50	3.11	-1.97		
II					
Experimental	20.79	3.46		.24	NS
Comparison	20.65	3.50	.14		
III					
Experimental	8.68	2.01		-1.78	NS
Comparison	9.26	1.76	-.58		
IV					
Experimental	21.87	5.48		1.07	NS
Comparison	20.83	6.22	1.04		

1) two-tailed, df = 156

Partially because of the timing of NED's involvement with BCEP, pretest data are not available for the experimental and control groups nor are comparable standardized test scores available which could have been used to test the assumption that the experimental and comparison groups are equal save for a career education orientation in the experimental groups. Therefore, defensible objective information concerning the impact of the BCEP program relative to the K-8 objectives A, B, and C is lacking. However, on the teacher opinionnaire more than 60% of the responding elementary and junior high school teachers who are involved with BCEP and approximately 50% of the non-user elementary and junior high school teachers agreed with the statement, "I think that including Career Education activities in the curriculum can improve student achievement in the content areas." (Appendix D--item 16)

D. To give teachers knowledge of career education concepts, career awareness, career exploration, career preparation, clusters and self-awareness techniques.

Rather impressive K-6 and 7-8 curriculum guides with a career-education-orientation were developed during the 1974-75 operational year and were updated during the 1975-76 year. These guides have been widely distributed to the schools of Bristol. The project records indicate that K-6 and special education teachers have been provided eighteen half-day workshops directed at this objective by BCEP during the 1975-76 year and which were favorably received by the teachers. After each workshop participants were asked to complete a seven-item evaluation form concerning all aspects of the workshop including organization, context, and presentation on a seven-point scale ranging from poor to excellent. Of the teachers who completed this instrument (N = 62*), approximately 80% or more rated the workshops as an above average experience (5, 6, or 7) on ALL facets. In addition, as reported in the summary of staff logs (Appendix I) the staff, on the average, spends more than 20% of their time in consulting activities directed in large part toward accomplishing this objective.

* This number represents a gross understatement of the forms actually received. After these data had been processed an additional fifty-five forms were received with an additional one or two being received daily.

E. To implement curriculum patterns that will illustrate the relationship of school subjects to the world of work;

AND

F. To provide for continuous curriculum development, revision, and evaluation;

AND

G. To enable students to have access and greater understanding of the many community resources available for him.

As noted above, the project has been responsible for extensive developmental work being accomplished in the area of infusing career-education-oriented concepts and activities into curriculum units as evidenced by the curriculum guides developed and published by BCEP. NED, however, does not have evidence concerning the extent to which these units have actually been used in the classrooms of Bristol. The curriculum guides and the units contained in them have undergone revision and up-dating.

The project does maintain extensive and complete records concerning the use of community resources by the schools. This use K-12 for the past two years is summarized below as Table V. It was necessary to conclude the data-gathering activities with about a month of school remaining in the 1975-76 academic year. This coupled with an extensive teacher's strike at the beginning of the year may, in part at least, explain the rather dramatic drop in the utilization of community resources in each category between the 1974-75 and the 1975-76 school years. The manner in which NED summarized these data from the BCEP records precluded an analysis by level, K-6, 7-8, and 9-12 to determine if the change was across the board or concentrated at one or two or the three levels. Nevertheless, the number of community contacts provided by the project for Bristol's students is impressive both years.

b. Grades 9-12

The 9-12 program served Bristol's two public high schools and a parochial high school. For all practical purposes the public high schools each had a fulltime specialist for the September, 1974, through June, 1976, (see Table I). The consultant serving the parochial high school was on fulltime assignment for the 1974-75 year; but because fo the size of the school and its level of involvement in career education this individual was reassigned to serve both the parochial high school (approximately 40%) and a group of elementary schools during the 1975-76 year.

TABLE V

Community Resource Utilization
by Activity by Cluster
1974-75 and Through May, 1976
K-12

	Agri-Business & Natural Resources	Business & Office	Communications & Media	Construction	Consumer & Homemaking	Environment	Fine Arts & Humanities	Health	Hospitality & Recreation	Manufacturing	Marketing & Distribution	Personal Services	Public Services	Transportation	TOTAL	% of Previous Year
Exploration																
1974-75	4	40	11	14	7	8	7	86	3	7	5	12	54	16	274	
1975-76	1	7	7	1	7	3	3	30	0	2	6	9	22	5	103	37.6
Field Trips																
1974-75	2	1	11	0	26	3	1	2	0	7	0	0	34	1	88	
1975-76	0	2	1	0	30	2	2	8	0	1	3	0	7	0	56	63.6
Speakers																
1974-75	0	22	16	8	6	8	5	49	3	18	11	15	45	11	217	
1975-76	2	15	10	7	12	6	10	27	3	13	7	20	51	4	187	86.2

A. To provide each student with opportunities regardless of his ultimate career goals, to have marketable skills that will enable him to enter the labor force should the need or desire arise for him to do so;

AND

B. To enable each student who desired to undertake advanced preparation, whether it be in a post-secondary technical school, college, university or business school to be so equipped with the necessary prerequisites to understand this advanced training.

There is no evidence available to NED that documents that Objectives A and B have been accomplished to any extent beyond what Bristol's program provided in the pre-project era. The BCEP, however, did produce and distribute a "How to Find a Job" booklet during the 1975-76 year.

C. To provide opportunities for students to participate in a meaningful occupational exploration.

As noted in Table A above, during the period September, 1974, through May, 1976, there have been impressive numbers of opportunities for occupational exploration provided to Bristol's students through the vehicles of exploration days, field trips, and speakers. Indeed each of the specialists serving Bristol's senior high school does have an established system for the preparing, the providing, and the follow-up of such exploratory experiences.

D. To provide greater encouragement for student enrollment in vocational education programs;

AND

E. To provide greater encouragement for student enrollment in work experience programs, and a wide range of work experience.

AND

F. To provide intensive guidance and counseling in preparation for employment and/or future education.

NED is not in possession of evidence that the "greater encouragement" required to fulfill 9-12 Objectives D and E has been forthcoming nor that the "intensive guidance and counseling" necessary to Objective F has been accomplished in any way unique during the project's life. The career education specialists assigned to each high school by the project are trained and certified guidance personnel and, particularly at the two public schools, they have reported a heavy degree of involvement directly with students. This direct student involvement by the career education specialists may have served in part to fulfill Objectives D, E. and F. As noted in the NED site memoranda dated 10/27/75, page 3 and 12/10/76, page 4, Appendix A, the conscious decision was made not to gather student data at the 9-12 levels.

G. To develop career information programs to be carried out by departments within the scope of the curriculum.

During the 1975-76 school year the project staff provided 9-12 teachers with a total of twenty-seven inservice sessions. Thirteen of these sessions were formally instructional in nature while the agendas for the remaining fourteen sessions indicate that the instruction was accomplished within a "share day" format. The 9-12 inservice sessions brought together the teachers of specific disciplines and often of specific classes with the discipline (i.e., Algebra I, Algebra II, Biology, Earth Science, etc.). As was noted earlier in this report, the BCEP staff requested that teachers complete an evaluation form and approximately 80% of the responding teachers noted BCEP's inservice sessions as an above average experience in seven major program components such as organization, presentation, etc. The BCEP has also produced and updated a 9-12 curriculum guide which has been widely distributed within Bristol schools. The "stage has been set" by the BCEP staff for accomplishing 9-12 Objective G. However, NED does not have evidence abailable concerning the extent to which career information programs have actually been developed and "carried out" by departments within the scope of the curriculum.

H. To establish a continuing avenue of communications between school, business, industry and community.

One of the outstanding accomplishments of BCEP has been its utilization of community resources (see Table V). Although the project staff has noted that during the pre-planning phase coordination with business, industry, labor, and education groups was noticably lacking, during its operational life the project did establish fine working relationships with these facets of the Bristol community (see Appendices B, C, D, E, and F). Furthermore, it was the business, industry, and labor groups that offered the most vocal support for continuing BCEP with local funds. It appears that the avenues of communications prerequisite for accomplishing this objective have been established. Whether these avenues are maintained after the project phases out remains to be seen.

I. To follow-up all drop-outs and graduates and to use such data in the planning of future programs.

BCEP did carry out a follow-up study for the classes of 1973 and 1974. The data, however, were not or at least only very incidently used as a basis for

planning future programs. Therefore, the project discontinued the follow-up studies and the class of 1975 was not surveyed by the project.

c. Placement Component Objectives

A. To locate and isolate significant career job opportunities in the community which can be offered to existing Bristol students;

AND

B. To offer such job opportunities to said students through a system which allows for clear and precise communications between employers, students and concerned education officials;

AND

C. To utilize information retrieval forms which permit a matching of student interest and abilities with job specifications;

AND

D. To develop processes which allow for the rapid identification of existing students who would be interested in using this placement service.

AND

E. To provide for the following systems within this placement service:
   1. Reporting
   2. Referral
   3. Follow-up analysis
   4. Program revision

Prior to the project's existence placement services were carried out through the uncoordinated efforts of a variety of programs and classes such as coop programs, business practices classes, etc. The project did develop what appeared to be a viable system for accomplishing the project's placement objectives. A prerequisite for that system to be successful, however, was city-wide coordination of the effort and the cooperation of the individuals who had been placing students from their classes and programs. In order to obtain the cooperation of the individuals traditionally involved in the uncoordinated placement efforts, a central office edict would have been required. Such an order was never issued and the BCEP model never became truly operational although the BCEP staff did attempt to initiate it and did manage to place seven young people into jobs.

d. Resource Center Objectives

The Resource Center Specialist assumed his duties during June, 1974, and began to establish the Resource Center at that time. The Resource Center itself was located at Bristol Eastern High School but housed materials appropriate for use in K-12 classrooms and by K-12 teachers. The Resource Center also placed materials into school libraries and directly into departments and classrooms

whenever it appeared that these procedures would enhance the utilization of materials. The records maintained for the utilization of BCEP provided materials at all of the various locations are spotty and, therefore, any quantities referenced in the following discussion should be considered as underestimates.

A. To serve as a dependable source of supply for the career education specialists and others availing themselves of the services of the program.

AND

B. To satisfy their needs, whether they be for some tangible item already in the Center, for something which must be developed especially to meet their particular need, or for one of the so-called "people resources" which are often the most difficult to produce.

AND

C. To serve as a source of suggestions for both new materials and new methods which the career education specialists cannot keep abreast of on their own. These suggestions cover both commercially and locally developed career education aids as well as materials and ideas borrowed from other career education programs.

AND

D. To serve as an on-going educational influence on those involved in the program by providing classroom teachers an understanding of what career education can offer them and their students through in-service teacher training sessions. These range from workshops designed specifically to acquaint teachers with the services of the Resource Center to those which involve participants in various activities which can be taken to the classroom and used to infuse career education into the curriculum.

As reported in detail as Appendix E, the teachers who have used BCEP services at all levels K-12 are overwhelmingly positive concerning both quantity and the quality of the materials and resources identified by and/or provided by the project for their use. As documented in the project's final report, June, 1976, the Resource Center apparently has fulfilled all four objectives--and more.

When teachers have used or reviewed materials for use, they have also been requested to provide the center with feedback information concerning the quality of and appropriateness for their classrooms of the materials. In spite of repeated follow-up efforts by the Resource Center Specialist, the return rate on the evaluation forms is so low as to preclude their use. However, the data in Appendix E indicate that the materials used by the teachers was generally viewed as being of "excellent" quality. Disappointing, however, was the extent to which materials available through the center were actually utilized as recorded in the center's records. The utilization of these materials is summarized as Table VI.

TABLE VI

Utilization of Primary Resources
Available in BCEP Resource Center
September, 1975 through May, 1976
Based on Checkout Records

Category of Materials	Total No. Pieces Available	Total No. Pieces Utilized	% Items Used	0	1	2	3	4 or more	Maximum No. of Times
A. Tapes, Cassettes, Film Strips	290	116	40.0	174	64	16	11	25	12
B. Books*	390	178	45.6	212	95	52	15	16	8
C. Kits & Other Instructional Materials	49	23	46.9	26	9	5	1	8	28

*Approximately 12% are for teacher use, balance intended primarily for students.

The Resource Center has made a considerable dollar investment to build an inventory of resources, more than half of which are not utilized. Even acknowledging the tendency toward obtaining underestimates of utilization as noted above coupled with the fact that it was possible for either students or teachers to use materials in the Resource Center without checking them out (the Resource Center Specialist reports that such use was not great), it appears that BCEP has invested in substantial amounts of un-utilized materials. With the apparent demise of career education specialists to work with teachers in the schools, it seems likely that these materials will be less apt to be used in the future than has been true in the past.

V. PROCEDURES

a. General

As has already been noted, BCEP has had its accomplishments but its aspirations both in terms of procedures and outcomes as stated in the initial funding proposal exceeded its accomplishments. BCEP's accomplishments, however, have not resulted in an articulated K-12 career education program. Indeed at the 9-12 level, there appears to be three separate programs with commonalities but which largely represent the personalities of the specialists serving a given school. Throughout the 1974-75 and the 1975-76 years, the project director has used techniques such as having staff shadow each other, discussions in staff meetings, and attempting to develop a project philosophy which were designed to lead to an articulated program. In NED's opinion, there are two major reasons why the articulated program has not developed even with the

project director's efforts. First, throughout the life of the project, neither the central office nor the Board of Education have made clear policy commitments and offered concrete support for the program beyond the initial permission to submit the original proposal. As the project staff itself has noted, this has led to some administrators permitting the project to operate in their schools rather than being truly supportive with other administrators not willing to become involved with the project, and has led to the project staff working only with those teachers who would "volunteer" to become involved. Although the BCEP staff did furnish the building administrators with an orientation to the program, they were never provided the opportunity to make similar presentations to the full Board of Education nor to the entire central office staff which may be another index of the lack of real support for the project by these key policy and decision makers. In their year-two report the former third-party evaluators made nine recommendations. One of these was, "Some statement, both public and within the Bristol Public School community, should be expressed by the administration. The project is notable for the lack of this visible administrative support." This same thing is again reflected throughout NED's site reports (Appendix A). In NED's judgement, the second major block for BCEP in the development of an articulated program is the fact that while individual staff members did attend training and conference sessions, the amount of common experience for the staff as a whole was very minimal. At the time each of the specialists was hired, they did not have any particular expertise in the area of career education nor were they expected to have such expertise. They have learned about career education somewhat independently and they as individuals have provided teaching staff with well-received inservice experiences; but the inservice experiences that each BCEP staff has had have been somewhat unique thereby encouraging the development of a fragmented program. It is strongly urged that in future efforts staff members, experienced or inexperienced concerning career education, undergo an intensive common career education inservicing before attempting anything as comprehensive as BCEP was attempting.

The original funding proposal called for the involvement of four elementary, three junior high schools, and two senior high schools during the project's first year. As illustrated in Table I this was not accomplished because the initial staffing of the project was not completed until the end of the first year. That is to say, not all positions were filled until September, 1974. During the second year, there was an attempt to provide services to seventeen elementary, all junior high, and all senior high schools in Bristol both public and parochial. During the project's third year, it was realized that the project staff was attempting too much with too few and a reduction in the number of schools served took place after the

project director surveyed each of the elementary schools to determine those schools with the highest percentages of teachers interested in participating. During the third year services were provided to eighteen schools including two public high schools and one parochial high school.

b. K-8 Procedures

The K-8 procedures defined in the original funding proposal were described under four broad headings each of these is briefly discussed below.

I. Select Career Awareness Specialist (K-6) and Career Orientation Specialist (7-8).

These positions were filled in January, 1974, (K-6) and in March, 1974, (7-8). This means that it was two-thirds of the way through the first year before both positions were filled. However, both positions did manage to become involved with the schools to some minimal degree during that first year.

II. Planning Activities

Planning activities for career awareness and career orientation programs commenced when the specialists in these areas joined the project staff. As noted elsewhere in this report, K-6 and 7-8 curriculum guides were developed. There is no evidence, however, that an overall career awareness curriculum plan was developed by the project. Indeed in their final report, the project notes, ". . . a flexible approach was used in allowing each school to participate in a career education program in a way that would be most effective to it, . . ." Throughout the life of the project there was an advisory committee which consisted of a director of elementary guidance and testing, supervisor of elementary education, and other key administrative/supervisory personnel. A NED representative was permitted to observe two of the meetings between this group and the project director. On the basis of those observations, it appears that the group was used as a sounding board for project concerns as opposed to being actively involved in planning sessions with the project.

III. Inservice Training of Staff

Although as noted above the project staff itself entered their positions with no particular expertise in career education, during the course of the project they were able to provide Bristol's teachers with resource information, selected activities, and a good number of well received inservice programs. Although these inservice programs have not resulted in an articulated program, this area probably represents one of the more successful procedural areas for the project. As a result of these inservice sessions rather complete curriculum guides were developed.

IV. Implementation

Implementation procedures are discussed throughout this report in terms of the procedures specified in the original proposal. Most of them appeared to have been implemented with varying degrees of success. The key one, however, implementing a continuously articulated program, as has been noted, showed only minimal progress. Even within specific buildings, there is little evidence that an articulated program exists in any of the schools with which a NED representative had contact and a NED representative did have contact with all of the schools served during the 1975-76 academic year.

c. 9-12 Procedures

The 9-12 procedures in the original funding proposal were described under five major headings each of which is briefly discussed below.

I. A program will be created where the artificial separation between things academic and things vocational are eliminated.

Under this procedural objective, there were listed six operational objectives. Progress has been made toward accomplishing the procedural objective but " . . . the artificial separation between things academic and things vocational . . ." largely remains. The six operational objectives are

1. Teachers, counselors, and career counselor will begin to function as a team--some minimal progress has indeed been made in one of the three high schools serviced by BCEP in accomplishing this objective. There is no evidence that a team approach has been adopted in either of the other schools served by the project.

2. A re-examination of grade 9 subjects to devise ways to incorporate the cluster idea and allow for career exposure for those who have not had the opportunity to participate prior to the establishment of this program--this has not been formally approached.

3. Team members will explore the clusters that relate to their particular subject area of instruction--this objective has been partially met through the inservice programs provided to the members of specific departments. However, the career-counselor-teacher team has not formally existed. At this point-in-time it can be said defensively that the opportunity has been provided to teachers in some subject areas to explore clusters that relate to their subject area, but little more.

4. Counselors will assume a role in the self awareness, career awareness, and the decision making aspects of the program--the career education specialists assigned to each of the three high schools, as has been noted, are experienced guidance personnel and they have indeed assumed a role of working directly with students in many instances on self awareness, career awareness, and decision making aspects of the program(s). The counselors of Bristol, or course, to varying extents, traditionally have been involved in such activities. That the project's efforts have changed or increased in any way the involvement of Bristol counselors in these activities is not known.

5. The Resource Center Specialist will assist the team in the preparation of visual materials and in supplying data where needed--a NED representative has observed the Resource Center Specialist serving this function for workshops provided by the other specialists and for presentations made to community groups by other specialists. The specific amount of involvement or services provided in this capacity, however, is not documented.

6. Counselors, with the assistance of the teacher, will plan Resource Center experiences with the students--resource center experiences have been planned and carried out for students at Bristol Eastern High School, but such experiences have been virtually nonexistent for the students from the other two high schools. It appears that the Career Education Specialist, not the counselors, at Eastern have been responsible for these experiences for students. This is easily understandable as the Center itself was housed at Eastern and the Secondary Career Education Specialist for Eastern was located in the Center.

II. A Resource Center will be established for K-12

A Resource Center Specialist was hired in June, 1974, and given the charge to develop and coordinate activities for this new center. As discussed in Section IVd of this report, this objective appears to have been largely met. The Resource Center Specialist has collected career information and materials and has supplied staff with those materials. He has assumed responsibility for the coordination of labor market information and for conducting follow-up studies as well as for the publication of the BCEP's newsletter.

III. Pre-planning workshops will be held

The pre-planning workshops were intended to involve representatives of business, industry, and education and to provide them an opportunity for input to program development including procedures and activities. This did not happen and therefore the procedural objective was not met.

IV. A placement counselor will be one of the three career guidance specialists hired to implement the final phase of a career education program. The placement counselor will be responsible for (1) coordinating the placement of existing students, (2) coordinating the placement of drop-outs, (3) maintaining liaison with students who have been placed on entry jobs, (4) coordinating information with the Resource Center, and (5) the researching of community needs and preparation of information for educational and curriculum revision.

This procedural objective has not been fulfilled as discussed in Section IVc of this report. A placement counselor per se was not hired, but the Project Director did attempt to implement the program defined by this objective. The Chamber of Commerce was cooperative, but an unusually high unemployment rate in the Bristol area worked against accomplishing this objective. There was an attempt to survey

community needs, but community support in the form of responses to that survey was lacking with the noted exception of the Chamber of Commerce. These factors coupled with the lack of Central Office support already discussed and the reluctance of those already involved in the placing of students has led to virtually no accomplishment in this area.

V. Areas of specialization and job preparation will be expanded for grade 11 and 12 students.

Some expansion of the areas of specialization and job preparation for grade 11 and 12 students has occurred in Bristol concurrent with the project's existence. However, as noted during the following discussion of each of the five operational objectives specified in the project's original funding proposal, this exapnsion has not been a direct result of the BCEP having been funded.

1. A Distributive Education Program with anticipated funding provisions of the Vocational Education Act will be initiated in September, 1973. This program will be housed in both Bristol Eastern and Bristol Central High Schools. Students from St. Paul's Catholic High School will participate--this program has been initiated but with grant monies separate from BCEP's.

2. A program for Educable Mentally Retarded students will be reinstituted on a full-time basis commencing in September, 1973. This program is scheduled to commence on an interim basis under Vocational Education Act provisions, commencing February 1, 1973, at Bristol Eastern High School. This program will come under the umbrella of the Bristol Career Education Program--separate grant monies were not forthcoming and this program was not instituted.

3. It is envisioned that within the next two years, specialized courses in Health and Food Services will be introduced to the curriculum under provisions of the Vocational Education Act. Initial program outlines are now being drafted at this writing--separate grant monies were not forthcoming and this program was not instituted.

4. Presently in operation in the Bristol School System are a Cooperative Work Experience Program and an Industrial Arts Program. Also offered are skills in Data Processing, Business Office Education, Homemaking and a newly formed Springmaking Program--these programs are currently available in Bristol but are not under the auspices of BCEP. The Springmaking Program is largely a "soft money" program designed to provide Bristol's springmaking industry with entry level workers.

5. Inservice training will be offered to counselors and teachers participating in the project. Inservice work will be done in affiliation with an area college where detailed planning has already taken place relative to establishment of a career education course offering commencing in September, 1973, and January of 1974. Course credit will be given to those personnel selected for this program--Although counselors have been

free to attend teacher workshops, BCEP has not provided formal inservice sessions specifically for counselors. From January to May, 1974, a vocational/technical professor and an industrial arts professor from Central Connecticut State College did provide a course for 36 participants and in September of 1974, the BCEP's first Project Director offered a course attended by 36 participants.

VI. DEMONSTRATION AND DISSEMINATION ACTIVITIES

As a Title V, Part D funded project BCEP did have obligations in the areas of demonstration and dissemination. The project has fulfilled its responsibilities in these areas with a record of accomplishments.

During the past two years the project has averaged more than one major newspaper item a week (Appendix F for samples) and radio coverage six times. In addition, the BCEP staff have presented their program and career education concepts approximately three times per month to groups such as PTAs, State Superintendents, Chambers of Commerce, service clubs, and regional labor organizations. These exposures have resulted in an unusual community awareness of career education and vocal community support for BCEP.

BCEP co-sponsored with The Capitol Region Education Council a successful December, 1975, workshop on the evaluation of career education programs for Connecticut educators. In addition, the Project Director's records indicate thirty groups of approximately two individuals each have visited BCEP during the last two years to observe and learn of their activities. The project has also issued a newsletter which carried reports of happenings in Bristol and served as a forum for career-education-related ideas.

With the assistance of an additional grant from the Office of Career Education, OE, HEW, BCEP's three curriculum guides have been distributed to more than 200 educators in forty states and the District of Columbia.

APPENDIX A

NED Site Reports

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

Subject: October 22-24, 1975, NED Site Visit

Date: October 27, 1975

Reference: Grant No. OEG-73-5301

From: Fred Gannon

I. OVERVIEW

This initial site visit by New Educational Directions (NED) to the Bristol Career Education Project (BCEP) primarily was intended to familiarize NED with the BCEP staff and operations and vice-versa. During this visit the NED representative observed a BCEP staff meeting, met with each of the BCEP staff individually, discussed this year's evaluation with the Director of Elementary Guidance and the Bristol Central High School principal, and discussed evaluation needs with the BCEP consultants serving the elementary schools and with the consultants serving the senior high schools. In addition, the NED representative reviewed project records and the IBEX reports for the project's first and second years.

II. GENERAL DISCUSSION

At this point in time one of NED's major concerns centers on identifying student groups which will provide interpretable student outcome data in an economically feasible way. It appears that it may not be possible to obtain such outcome data at the junior and senior high school levels but that it may be possible to obtain interpretable data for a sampling of elementary school students. This matter will be a focus of attention as NED and BCEP staff work together on November 6-7.

The NED representative reviewed the staff's weekly reports. Although these reports may serve administrative or public relations functions, NED is concerned that they may do a disservice to the staff efforts as a result of their summary nature and they lack the specificity to be used as a meaningful part of the evaluation. In addition, the record provided by these reports is incomplete since they are prepared by the specialists only. Therefore, NED suggests that ALL BCEP paraprofessional and professional staff maintain a daily log of activities. Forms for such a log are being reviewed and modified by BCEP staff.

The way in which the staff views the project's future ranges from a fatalistic "This is our last year." to an optimistic, "We are needed so something will come along." The mode of staff opinion, however, regarding the future tends toward the more fatalistic end of the continuum. It is interesting to note that even with this situation, the staff appears genuinely interested in accomplishing as much as possible during the current school year. There is an additional factor which is apt to have an increasingly negative impact on staff performance as the school year progresses. This factor is the insecurity of the staff not knowing whether or not they will be employed during the 1976-77 year. Positive action on the part of the central administration and/or board of education could do much to negate this situation. It is respectfully suggested that, if at all possible, all tenured project personnel be guaranteed a position for the coming academic year thus removing one possible source of difficulty for the project.

It appears that only incidental coordination of each staff member's efforts with other staff members is occurring. This results in seven parallel but to some extent independent efforts rather than a single project-wide effort. Furthermore the specialists tend to feel that they have very little input concerning the development of project policies or project decision-making. A September, 1975, meeting during which each staff member was provided an opportunity to describe his or her plans and accomplishments was positively reported by several of the specialists. The director may wish to provide additional such sharing activities for the staff.* He may also wish to make concerted efforts for obtaining staff input for overall project planning and decision-making. Establishing good and open lines of intra-staff communications is an area toward which the director will wish to devote some effort.

The Materials Center appears to be well organized and well stocked with useful career-education-oriented materials. (The NED representative did not have an opportunity to inspect any of the satellite centers during this visit.) Record keeping for the Materials Center itself appears adequate and it should be possible to determine the extent of use of materials which are housed at the Eastern High School facility. However, because of the satellite centers, these records will provide an under-estimate of the project-wide use of materials. The Materials Center director has developed a form to elicit feedback concerning the usefulness of materials. NED urges him to begin using this form as soon as possible.

III. NEXT STEPS

During this site visit samples of forms which, if appropriate, might be modified for data-gathering purposes were provided to the BCEP staff for review. During NED's November site visit, Mr. Gannon will meet with the BCEP staff and together they will finalize the design to be used for the 1975-76 year and will identify the instrumentation to be used.

Also to be discussed during the November visit will be possible parent, sutdent, teacher, and business/industry surveys. In addition, Mr. Edmondson and Mr. Gannon will delineate the areas to be covered in the December interim report.

*Subsequent to the release of this site report, NED reviewed project records which indicate that sharing sessions such as the September staff meeting will be a monthly event. In addition, a schedule has been established for a program where project staff will shadow each other. These activities should foster a greater group cohesiveness and a greater understanding by each staff member of the activities of other staff members.

F.B.G.

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

Subject: November 6-7, 1975, NED Site Visit

Date: November 17, 1975

Reference: Grant No. OEG-73-5301

From: Fred Gannon

I. OVERVIEW

The basic purposes of this site visit were to establish guidelines for data-gathering techniques to be used at the elementary, junior high school, and senior high school levels, to determine the nature of the December, 1975, interim report, and to define an evaluation design acceptable to both NED and the BCEP staff. Toward these ends, the NED representative met with the career education specialists serving each of the levels and the project director. During those meetings existing instrumentation was reviewed and questionnaires for community representatives and school principals were developed. In addition, Mr. Gannon visited the Edgewood School Career Education Activity Center and observed two groups of students as they received orientation to the Center.

II. GENERAL DISCUSSION

A. December Report

Mr. Edmondson and Mr. Gannon agreed that the "December 1975 Interim Report" will be a brief document of 2-4 pages. It will provide a synopsis of BCEP activities as related to the project's objectives from its beginning through mid-November 1975. The only "new" information which will be included in this report will be summaries of the two questionnaires which were jointly developed by NED and the BCEP staff and which have been distributed to Bristol principals and to all individuals on the BCEP community resources list. This report will be completed and released no later than December 1, 1975.

B. Evaluation Activities--General

The staff logs which are being maintained by all BCEP staff members will be a major source for a description of the project's process. To the data available from the logs will be added the observations and interview information obtained during NED site visits. The staff logs will be summarized monthly by NED and, where and when appropriate, comments and recommendations based on the log data will be offered.

In early May, 1976, all teachers with whom the career education specialists are working directly will be requested to complete a questionnaire. The focus of this questionnaire will be on the quality and the quantity of BCEP's services to these teachers. A draft instrument for this purpose is currently being reviewed by the career education specialists and a final form will be agreed upon during NED's next site visit.

Also in early May, 1976, all Bristol teachers will be asked to respond to a brief opinionnaire designed to assess their knowledge of and attitudes toward career education. Data from this opinionnaire will be tabulated separately for the teachers who have been working directly with the BCEP staff and for all other

teachers. A draft opinionnaire for this purpose is currently being reviewed by the career education specialists and a final form will be agreed upon during NED's next site visit. It is NED's preference to have this teacher questionnaire completed during one of the schools' regular faculty meetings, collected by the principal, and returned directly to NED if at all possible.

In addition, project records will be utilized to obtain descriptions of field trips, shadow experiences, and the utilization of materials. During NED's December site visit, we would like to consider the possibility of getting feedback from the sponsors of field trips and shadowing experiences if such information is not already being obtained.

C. Evaluation Activities--Elementary Schools

Mr. Doherty, Mr. Dolce, Mr. Edmondson, and Mr. Gannon met on the afternoon of November 6 for the purpose of discussing this year's evaluation activities in the elementary schools.

It was agreed that control and experimental classrooms can and will be identified, but the grade levels of those classrooms have yet to be defined. However, this decision will be made during NED's December site visit and specific classrooms to be involved will be identified. If the kindergarten and/or grade one classrooms are to be included as experimental and control classrooms project-developed student questionnaires will be used at these levels and NED is willing to work with the career education specialists and representative classroom teachers in the development of such questionnaires. The Careers Orientation Battery (COB) published by NED is being reviewed by the elementary career education specialists for appropriateness to the BCEP objectives in grades 2 through 6. This review will be completed by NED's December site visit and at that time a decision will be made as to what COB scales are appropriate for use in Bristol and, if necessary, revision to those scales deemed appropriate will be made.

If the decision is made to administer student questionnaires at two grade level levels then it will be possible to use five or six experimental and control classrooms, if the decision is made to administer student questionnaires at three grade levels then the number of control and experimental classrooms involved will have to be reduced accordingly because of the budget limitations.

Wherever possible to obtain the classroom teachers cooperation it will be desirable for the teachers of experimental classrooms to maintain a classroom activities record (CAR). Such a record will be very valuable for interpreting student questionnaire results. However, teachers should not be coherced into maintaining such a record. If a CAR is not maintained by the experimental teachers then either interviews or questionnaires will obtain a description of "the career education treatments" in the experimental classrooms. Using the interview or questionnaire approach yields a lower quality of information than a well-maintained CAR, but will require less effort on the part of the cooperating teachers.

D. Evaluation Activities--Junior High Schools

Mr. Edmondson, Mr. Gannon and Mr. Llopis met on the morning of November 6 to discuss this year's evaluation activities in the junior high school.

It appears that by working with St. Anne's and Stafford Junior High School it will be possible to identify experimental and control groups. In addition, Mr. Llopis will attempt to have the CAR maintained in at least two experimental classrooms. The comments made under C above are equally appropriate regarding the use

of the CAR at this level. In February, 1976, a brief (not more than 5 items) questionnaire will be administered to the cooperating teachers at Stafford and St. Anne Schools to determine the extent to which the Stafford teachers are involved or hopefully uninvolved in career education type activities. The COB is currently being reviewed for appropriateness by Mr. Llopis and it is anticipated that some scales from the COB will be administered to experimental and control groups at the junior high school level. Revisions which may be required before using the COB in Bristol will be made during NED's December site visit and a firm decision will also be made concerning the COB scales to be used. The experimental and control classrooms at the junior high school level also will be identified at that time.

E. Evaluation Activities--Senior High Schools

During the morning of November 7, Mr. Doherty, Mr. Edmondson, Mr. Gannon, Mr. Phelan, and Ms. Quinn discussed possible evaluation strategies for use at the senior high school levels.

It was agreed that there appears to be no economically feasible way to identify student groups by the amount of exposure they have had to career-education-related activities at this time. The possibility of having the students themselves report this information was considered, but discarded because NED's experience has been that this approach does not yield useful information. Without being able to identify "treatment" groups, student outcome data becomes uninterpretable. Therefore, it was agreed that there will be no student questionnaires administered at the senior high school level. This is regretable since a major thrust for BCEP has been at that level, but it is NED's judgment that to collect uninterpretable data is not a justifiable use of instructional time or the project's monies. Evaluation of the project at the senior high schools then will focus on teacher data and such activities as discussed in B above.

F. Evaluation Activities--Materials Resource Center

Evaluation activities as they will relate to the materials resource center and its satellites have not yet been specifically addressed. Although Mr. Gannon did a cursory examination for the center's records during his October site visit and Mr. Matt is maintaining a log of his activities. During the December site visit visit Mr. Edmondson, Mr. Gannon, and Mr. Matt will wish to address themselves specifically to this topic.

G. Career Placement Service

The project has developed what appears to be a viable career placement service intneded to ". . . provide a career placement service to terminating secondary students (graduating or withdrawing) of the Bristol public and parochial high schools." Thusfar minimal use appears to have been made of the service and it appears to be competing with other school-based placement efforts. Therefore, NED suggests that Mr. Edmondson in concert with the appropriate representative(s) of the superintendent's staff make an effort to have all school-based placement efforts coordinated through either the BCEP or one of the other existing placement services.

III. GENERAL SUMMARY

A great deal was accomplished during this site visit and NED appreciates the willingness of every staff member to contribute in a positive way to the project's

evaluation. Furthermore, NED recognizes those contributions as not only positive but of a consistantly high quality.

Understandably, the staff continues to have concerns regarding their future and NED reiterates the recommendation regarding tenured personnel offered in our October 27 memorandum.

IV. NEXT STEPS

The next site visit will have to focus on completing the activities noted in Section II above.

With the director's permission, it may be desirable to schedule that visit to be three rather than two days long.

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

Subject: December 2, 3, 5, 1975, NED Site Visit

Date: December 10, 1975

Reference: Grant No. OEG-73-5301

From: Fred Gannon

I. OVERVIEW

The primary task for this site visit was to provide the NED representative an opportunity to work with the career education specialists serving each level and the director of the Resource Center to finalize data-gathering procedures. This was accomplished. The interim report and the community and principals' surveys summaries were delivered. (With Mr. Nolan's and Mr. Edmondson's approval a covering letter from NED for the community survey was composed and released to the project director on December 9.) Mr. Gannon also met twice with Mr. Nolan and Mr. Edmondson to discuss project-related matters. Mr. Gannon also observed a Board of Education meeting and a presentation made by Mr. Dolce and Mr. Doherty to the local labor council.

II. GENERAL DISCUSSION

Mr. Doherty's and Mr. Dolce's presentation to the labor council, in NED's opinion, was a professional one and they did a fine job of presenting an objective "picture" of career education in Bristol to this group. The slides prepared by the Resource Center to be used in the presentation, however, appeared to be hastily assembled and were not entirely appropriate to the presentation (i.e., five circus slides). Perhaps in the future the slides could be selected so that each one represents a different career education activity or concept.

During this site visit NED reviewed the evaluation forms from ten of the project's teacher inservice programs. Mr. Gannon also observed the final forty-five minutes of one of the secondary programs. On the basis of the evaluation forms and Mr. Gannon's observation, the staff is doing a truly outstanding job of providing quality inservice programs which are appropriate to the teacher's needs.

Of major concern to NED is a deterioration of staff morale which, in part at least, can be attributed to what the staff views as a lack of Board and Central Office support for their efforts. During a December 5 meeting between Mr. Nolan, Mr. Edmondson, and Mr. Gannon, Mr. Nolan made some valuable clarifying statements which he indicated he would share with the BCEP staff during their December 10 meeting. Noteworthy was the fact that the Central Office will be working with the project director on developing plans for hard money support of the project. NED indicated its willingness to serve as a resource for such Central Office and/or Board planning sessions. The cost analysis document prepared by the project staff appears to be well done and should prove to be a valuable resource for such planning sessions. Even more important was Mr. Nolan's clarification of the "every effort will be made to place BCEP staff next year if the project is phased out" statement. These positions when made known to the BCEP staff should do much to improve staff morale.

Staff logs for November were collected and a separate report will be issued concerning them as soon as they are processed by NED.

The staff, as a group, continues to express a desire for more input into the decision-making process and the project director has taken steps through staff meetings and personally is committed to providing for increasing amounts of staff input in this area. Concern was also expressed by one-third of the staff members that necessary clerical services are not available to them when needed. The availability of clerical services for the specialists may be a fruitful topic for a staff meeting.

As has been noted in previous NED memoranda, a project philosophy and a project-wide approach to career education as compared to seven hard-working staff members operating in relative independence would be very desirable considering the project's exemplary nature. The project director is providing leadership towards this end. A meeting to address the development of a "project career education philosophy" has already been scheduled. Once developed, the philolophy will provide the framework for necessary project-wide program development. The availability of both a project philosophy and a project program would be plus factors for NED were we in a decision-making position concerning the movement of your efforts from project ot program status.

III. EVALUATION ACTIVITIES

a. General

Three forms (K-6, 7-8, 9-12) of a questionnaire to be administered to all Bristol teachers were developed jointly by BCEP and NED staffs. In order that the results may have some potential use for planning, the decision was made to administer this questionnaire in January, 1976, rather than in the spring of 1976. Mr. Edmondson will contact all principals to request that five minutes of a regular staff meeting be devoted to administering it. After being administered, questionnaires will be returned directly to the NED offices by the school.

Three forms (K-6, 7-8, 9-12) of a teacher questionnaire for those teachers with whom the staff is working intensely were also jointly developed and will be administered during spring, 1976. By Christmas all specialists will provide NED with a list of those teachers with whom they are working intensely. (Mr. Dolce has already provided such a list.) If the specialists wish to do so, names can be added or deleted at a later date.

All six of these forms will be sent to the project director and the appropriate specialists for a final review before they are printed.

b. Resource Center

Teachers have not been returning the "Instructional Materials Evaluation Form." Therefore, Mr. Matt has developed a greatly abbreviated form of four items with all identifying information completed by the Center. The new form should require less than thirty seconds of a teachers time to complete. It is to be hoped that the rate of return for this new form will be good although even this form may require some follow-up action such as a telephone call by the Center to obtain returns from some of the teachers.

Data to document the Center's services will be obtained in the following areas:

(1) Personnel services to teachers and specialists will be obtained from the director's log.
(2) Equipment availability will be based on a complete inventory to be supplied by the director.
(3) Equipment utilization records will be available only for video equipment.
(4) Books, pamphlets, tapes, and film strips.
   a. Center records will indicate what materials went into each elementary school, but it is not feasible to maintain records of actual use of those materials housed in the elementary schools.
   b. Center records will provide a complete picture of materials checked out directly from the Center by teachers and/or students with the exception of pamphlets which are "give-away" items. (This is true of pamphlets at all sites.)
   c. Materials utilization at the senior high school satellite sites (libraries) will be handed as follows:
      * Books--Mr. Matt will ask that standard library check-out procedures be used. The library records for all Center-supplied books will be reviewed in the spring of 1976.
      * Tapes and film strips--Mr. Matt will request that each library maintain a simple log for these materials. Each time a student requests these materials, he/she will be asked to enter: date, name of materials, grade level, and to check the value of the materials for him or her.

c. Career Exploration Days and Field Trip Services

Each of the specialists has developed a form and procedure for follow-up work with students after a career exploration day or field trip experience. NED has requested that feedback also be obtained from the community sponsors of these experiences. Ms. Joan Atkinson is modifying a form from another project and will incorporate it with a "thank you" letter to be sent out after each experience.

d. Elementary Schools

Student outcomes will be assessed at grades 3 and 6 using the Careers Orientation Battery (COB) as modified by the elementary specialists. The COB will be administered to approximately four experimental and four control classrooms at each of these grade levels.

In addition, Mr. Dolce, a NED staff member, and a group of kindergarten teachers will work together to develop procedures for assessing student outcomes at the kindergarten level.

e. Junior High Schools

Student outcomes will be assessed at grade 8 using the COB as modified by the junior high school specialist. The COB will be administered to approximately three experimental and three control classrooms at each of these grade levels.

Mr. Llopis has also persuaded the experimental teachers to maintain a "Classroom Activities Record" (CAR) which will be helpful to NED during data interpretation.

f. Senior High Schools

It appears that there is no economically feasible way to obtain interpretable student outcome data at this level. Therefore, the assessment at this level will focus on services delivered and on feedback from teachers.

IV. GENERAL SUMMARY

Once again, the BCEP staff demonstrated their willingness to make positive contributions to the assessment process.

Progress appears to be being made on all fronts by the project staff. The staff is to be doubly complimented since this progress is being made in spite of a rapidly deteriorating overall staff morale attributable in part to what is perceived by the staff themselves as a lack of Board and Central Office support for their efforts. It is to be hoped that Mr. Nolan's December 10 meeting with the staff will allay these concerns.

The assessment procedures have "shaped up" to NED's, and hopefully to the staff's, satisfaction.

V. NEXT STEPS

NED will provide revised draft instruments for final staff review within the next month. Also forthcoming from NED during that period will be a summary of the staff's November logs.

NED's next site visit will be scheduled so that we will be available to work with the Central Office staff is so requested.

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

Subject: January 7-8, 1976 Site Visit

Date: January 19, 1976

Reference: Grant No. OEG-73-5301

From: Fred Gannon

I. OVERVIEW

This NED site visit consisted of a day and a half of virtually non-stop meetings. The meetings that I attended and/or participated in during this visit were the Central Office Administrative Staff, the Career Education Planning Committee, the Bristol Chamber of Commerce, and the Bristol Board of Education. In addition, Mr. Doherty, Mr. Edmondson, Mr. Llopis and I met with Mr. Nolan to discuss project-related matters and staff reassignments. The timing of this visit was excellent because a number of events occurred which are key to the BCEP's future as discussed below.

II. GENERAL DISCUSSION

Since NED's December site visit, BCEP has lost the services of Ms. Redmon, secretary, and Mr. Llopis, specialist, through resignation. The project also has lost the services of Mr. Dolce, specialist, for a period of at least three weeks. These circumstances could have resulted in a serious disruption of BCEP services to the schools. However, the project administration immediately reassigned staff to assure that project services would continue and the remaining project staff assumed additional duties with apparent good will. The entire project staff is to be complimented on their efforts to provide uninterrupted services.

The BCEP staff has prepared one of the best cost analyses for their various services which NED has seen. This document was presented to the Bristol Central Office Administrators and the BCEP Planning Committee. Both of these groups appeared to concur with NED's assessment of the cost analysis. This document should prove invaluable to these two groups. At this point it should be noted that as NED observed these two groups in meeting, it was obvious that all of the concerned parties appeared to be supportive of the project's efforts and demonstrated genuine concern for moving BCEP from project to program status.

III. EVALUATION ACTIVITIES

Teacher opinionnaires to be administered to all teachers as soon as possible have been reviewed by appropriate BCEP staff and printed copies will be released to the project during the week of January 19. Mr. Edmondson will make arrangements to have these brief forms administered during a teachers' meeting at each of the schools. The completed opinionnaires are to be returned directly to NED in postage-paid envelopes provided by the project. NED will process the opinionnaires and issue a summary report within ten days after the forms have been received from all of the schools.

NED's next site visit is scheduled for February 24. During that visit, Mr. Dolce and Mr. Gannon will work with a group of kindergarten teachers in an attempt to develop procedures and/or instrumentation to assess the impact of career education activities at the kindergarten level. NED is also holding February 4

open for BCEP in the event that the project director or the central office administrative staff wishes us to be present for a Board of Education career education presentation.

IV. SUMMARY

In spite of the resignations of two staff members and the loss of another from illness, the project appears to be making admirable progress. NED does urge that every effort be made to replace the two open positions at the earliest possible moment.

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

info cc: Mr. Doherty, BCEP
Mr. Dolce, BCEP

Subject: February 23, 1976
Site Visit

Date: March 4, 1976

Reference: Grant No. OEG-73-5301

From: Fred Gannon

I. OVERVIEW

The kindergarten teachers of Bristol represent one of the groups identified by the BCEP staff which has most effectively infused career education concepts into their classroom programs. Therefore, the primary purpose of this site visit was to provide NED an opportunity to work with seven representative kindergarten teachers for the purpose of exploring ways in which the impact of career education on kindergarten students might be assessed. It was toward this end that most of this visit's activity was directed. In addition, however, I did have an opportunity to discuss the project's day-to-day operations with some of the staff members.

II. GENERAL DISCUSSION

a. Kindergarten Teachers' Meeting--The general approach for this session was to address as a group the following four questions:

(1) What experiences do kindergarten children involved in career education have that other kindergarten children do not have?;
(2) How are kindergarten children who participate in a career education program different from children who do not participate in a career education program?;
(3) How are those differences expressed in behavior?; and
(4) How can those differences in behavior be assessed or measured?

It appeared to be the concensus of the group that the difference between career-education-oriented and non-career-education-oriented kindergarten classroom is on a quantity dimension rather than on a kind dimension. That is to say, some community (job) and self-awareness activities are components of all kindergarten classrooms but these activities receive a great deal more emphasis in career-education-oriented classrooms.

This greater exposure appears to result in children who are described as

(*) more aware of the feeling aspects of jobs;
(*) happier;
(*) more self-aware; and
(*) more tolerant and understanding of each other.

The conditions noted above in the teachers' judgements apparently result in children who

(*) exhibit greater self-control;
(*) are freer to express feelings;
(*) are more inquisitive and freer to ask questions; and
(*) relate better to each other.

The next step was to consider ways in which the identified behaviors could be assessed. It is unfortunate that within the time available this task was not completed to the point where specific procedures were agreed upon and a workable system resulted. However, a number of possibilities were identified and the outcomes of this discussion are summarized below.

Behavior Category	Possible Techniques to Assess
I. Self-awareness	
a. Body parts--"I know how I am made up."	1. draw a man 2. draw themselves 3. point to body parts game 4. put together puzzle
b. Alikes--differences How am I unique--some physical characteristics interests tastes abilities	1. Interview (i.e., can you skip? Is this true of everyone?)
c. Decision-making independence interdependence self-direction consequences	1. Interview 2. Structured classroom observation 3. Teacher checklist
d. Recognizing Special Relationships over under around through	1. Teacher checklist 2. Structured classroom observation 3. Have each child or a sampling of children complete a set of tasks
e. Express, Recognize, and Accept the Feelings of Self and Others	1. Identify emotions in pictures 2. Role playing - children - dolls - puppets
f. Group Relationships and Team Work	1. Observe children working on a group task such as solving a puzzle 2. Teacher reporting 3. Teacher checklist
II. Career Awareness--feeling aspects of jobs	
a. Knowledges of parents' jobs	1. Teacher checklist 2. Student interviews
b. Work habits	1. Teacher checklist 2. Following directions tasks for students
c. Knowledge of jobs touching them	1. Teacher checklist 2. Student interviews

Behavior Category	Possible Techniques to Assess
d. Curiosity-quantity and quality of questions	1. Provide a kit of unique materials and observe children's reactions 2. Structured classroom observations 3. Teacher checklist

In addition, scores from the Metropolitan Readiness Test and the Pintner-Cunningham Scales may be analyzed to assess any differences in "academic" performance which may be found between children in career-education-oriented classrooms and other classrooms.

Using the input from the kindergarten teachers, NED will attempt to design an assessment approach appropriate for the kindergarten career education objectives. NED will also provide the BCEP administrator and staff with a cost estimate of applying the approach so that a decision can be made concerning the cost effectiveness of data gathering at this level.

b. Miscellaneous Other Matters--The second round of teacher questionnaires will be administered during the week of May 10. These questionnaires will be completed only by teachers with whom the project staff is working directly. The completed questionnaires are to be returned to NED by the teachers in postage-paid envelopes which have been provided.

The Careers Orientation Battery (COB) will be administered to selected classes at grades 3, 6, and 8 during the week of May 3 and returned to NED for processing no later than May 10.

NED continues to be concerned with staff morale and instability within the project. Since late December, the project has lost three of its eight staff members with only one of those positions having been replaced. If the project is to be continued, it would seem wise to fill these positions so that the training of the new staff can be accomplished while the project is still on federal funding.

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

Subject: March 22-23, 1976 Site Visit

Date: March 29, 1976

Reference: Grant No. OEG-73-5301

From: Fred Gannon

I. OVERVIEW

The primary purpose of this site visit was to provide NED with an opportunity to interview the principals of schools in which BCEP is working. In addition, the NED-prepared "Summary of Teacher Opinionnaires" was distributed to the project and Mr. Edmondson and I briefly discussed NED's March 19 "Evaluation in Kindergarten" Memorandum.

II. GENERAL DISCUSSION

a. Principals' Interviews

Interviews with eleven of the seventeen principals of schools with whom BCEP is working were accomplished during this site visit. Elementary, junior high school, and senior high school principals were represented in the group interviewed. The remaining six principals will be interviewed during NED's April site visit. During each interview the principal's response was sought to each of four questions. Their responses to each of those questions are summarized and briefly discussed below. It should be noted that because the approach to the interviews was an informal one, the topics were not always covered in the same sequence during each interview.

Q1. What impact do you feel the BCEP has had on your school's instructional program?

One elementary principal reported that all of his teachers had infused career education into their instructional programs while six of them reported that from a quarter to two-thirds of their teachers were regularly infusing career education into their classroom instructional programs. Three principals suggested that the project's greatest impact had been in the area of changing teachers' attitudes by making them more conscious of relating subject matter to its practical applications. Two of the elementary principals mentioned the reduction of field trips sponsored by the project as unfortunate and one of these men indicated that this action had in effect negated any impact the project might have made on instructional practices in his school.

Q2. BCEP has offered services in three general areas: (a) consulting with teachers; (b) providing career-education-related materials; and (c) providing inservice workshops for training teachers. If reduced finances forced you to select just one area of services to be continued, which one would you feel would be the most valuable and provide the best return for the money spent?

Six of the principals interviewed indicated that, if forced to make the choice, they would opt for retaining the consultant functions although two of them added that they assumed that if consultants were available some inservice programs could be provided by them. Four of the principals placed the highest priority on a continuation of the workshops. (It should be mentioned that ten of the eleven principals offered complimentary remarks concerning the BCEP workshops.) One principal noted the providing of materials as the most valuable of the three options but indicated that providing field trips would be more valuable than that but added that he viewed career education as appropriate to the junior and senior high schools not elementary schools.

Q3. If project services are continued, what do you predict will be the status of career education in your school a year from now?

Ten of the eleven principals indicated that they would anticipate a continued expansion and/or refinement of career education practices in the classrooms and guidance programs of their schools. One principal felt that little was now occurring and unless field trip services were reinstated, the situation was unlikely to change.

Q4. If project services are discontinued, what do you predict will be the status of career education in your school a year hence?

Three of the principals indicated that with their leadership and through peer teaching by their teachers career education would continue to develop and expand in their schools albeit at a considerably lesser rate than would be true with BCEP supported services. Seven of them indicated that without BCEP support, those teachers currently involved with career education would continue to be involved but that additional progress would be either minimal or non-existent and some regression would be likely. The eleventh principal indicated that there was very little happening in career education and that was unlikely to change.

Ten of the eleven principals were generally positive toward the project and by-and-large complimentary regarding its services. Three of them, however, did mention the discontinuity of services caused by the teachers' strike in 1975, the extended illness of BCEP staff, and the change of BCEP staff as irritants. They did add, however, that these situations largely represented circumstances outside of the control of the project.

During the interviews two of the principals volunteered the opinion that from the beginning it had been their judgement that BCEP was never anything but a three-year project and it was a forgone conclusion that after some public "debate," it would not be picked up as a local program in any form. If this is indeed true or if for any reason BCEP does not receive some local support, the situation will be counter to what has been true nationally for career education funded programs. A recent National Institute of Education sponsored study (1) identified ten things usually retained or expanded by school districts after the outside funding of career education programs has ceased. Perhaps this information will be useful to Bristol's decision makers.

(1) Brickell, H.M. and Asianian, C.B., "Learning to Live on Hard Money," Policy Studies in Education, New York, Paper presented at the Second Career Education National Forum, Washington, DC, March, 1976.

1. Central office endorsement of career education.
2. CAREER EDUCATION LEADERS AND AN IDENTIFIABLE PROJECT STAFF.
3. The idea of infusion, particularly for easy-to-infuse subjects like social studies.
4. The idea of using the community.
5. Trips and speakers.
6. The practice of developing/adapting materials locally--both to get materials and to get teachers involved.
7. The practice of putting useful materials into teachers' hands.
8. Direct assistance to individual teachers--a shift rather than a continuation or an expansion.
9. Skills in project management.
10. A sense of LEA leadership in career education.

b. Kindergarten Assessment

Mr. Edmondson and I discussed Ms. Bonnet's March 19, 1976 memorandum concerning possible approaches for assessing the impact of career-education-related activities on the behavior of kindergarten children. It was agreed that Ms. Bonnet will more fully develop the simulated guest speaker approach and have a fully developed approach prepared for consideration of the BCEP staff during NED's April site visit. At that time, a final go/no go decision will be made regarding the application of this approach.

c. COB Inservice Sessions

NED will prepare a two hour training session designed to familiarize teachers with the "Careers Orientation Battery" (COB) and to instruct them in the administration of it. NED will be prepared to present this workshop during their April site visit.

d. Staff Morale

As has been previously noted, the uncertainty of the project's future is serving to decrease staff morale. Coupled with this uncertainty is the widespread rumor given credence by newspaper articles that the decision to not fund BCEP has long since been made but not shared with the staff. The staff continues to provide services to the schools but with a degree of hopelessness concerning the future unavoidably but inadvertantly being conveyed to those whom they are serving. NED once again urges that the central administration inform the staff of the project's future at the earliest possible moment.

III. NEXT STEPS

During NED's next site visit we will

(1) complete the principal's interviews;
(2) provide the COB training sessions;
(3) interview all BCEP staff members; and
(4) finalize plans concerning the assessment at the kindergarten level.

IV. FINAL WORD

NED was pleased to note that the open positions of consultant and project secretary had been filled with apparently well-qualified individuals.

Memorandum for: THE RECORD

cc: Mrs. Bonnet, NED
Mr. Edmondson, BCEP

Subject: April 12-13, 1976
Site Visit

Date: April 20, 1976
(May 4, 1976)

References: (a) Grant No. OEG-73-5301
(b) NED's Memorandum for The Record dated March 29, 1976

From: Fred Gannon

I. OVERVIEW

This site visit was scheduled to provide NED an opportunity to conclude the interviews with principals of schools in which BCEP is working. NED also interviewed all of the BCEP staff with the exception of one individual who was attending an out-of-town conference during this NED visit.

II. GENERAL DISCUSSION

a. Principals' Interviews

An additional five princiapls were interviewed during this site visit bringing the total number of princiapls interviewed to sixteen. The interviewing approach and the areas covered during the interviews were identical to those for the earlier interviews as reported in the March 29 memorandum.

Q1. What impact do you feel the BCEP has had on your school's instructional program?

Four of the five principals indicated that from twenty-five to 100% of their teachers were in some way involved in career-education-related activities with infusion into the regular instructional program as the most frequently noted approach. One of the secondary principals indicated that while the project was providing some assistance to teachers, the primary emphasis was on providing services directly to students.

Q2. BCEP has offered services in three general areas: (a) consulting with teachers; (b) providing career-education-related materials; and (c) providing inservice workshops for training teachers. If reduced finances forced you to select just one area of services to be continued, which one would you feel would be the most valuable and provide the best return for the money spent?

Three of the five principals indicated that the consultant services represent the facet of the BCEP program which they would give the highest priority for retaining. The other two opted for materials but one of them indicated that it was extremely desirable to also have a consultant available to assist teachers in using materials effectively. During the discussion of this topic, one of the principals volunteered the opinion that a loss of funding for the BCEP would not be serious as the BCEP activities at the school had been an appendage and had not substantially been integrated into either the school's instructional program or its guidance services.

Q3. If project services are continued, what do you predict will be the status of career education in your school a year from now?

All five principals indicated that with BCEP services continued, they would anticipate the continued development and refinement of career education in their schools. However, one principal indicated that BCEP staff should begin to work more directly with students (not currently a BCEP objective) and two of them mentioned that they would like to see counselors assume a greater leadership role in Bristol's career education efforts.

Q4. If project services are discontinued, what do you predict will be the status of career education in your school a year hence?

Four of the five principals indicated that without support services career education would continue to develop for a time but that its development would be fragmented and ultimately career education as such would fade from the scene. One of these principals during the discussion of this topic indicated that more than minimal support is needed and that career education, " . . . is important to have and is important to fund!" The fifth principal indicated that teacher participation was at present "spotty" and without BCEP, it would be virtually non-existent within a year.

One principal whose school has been served by three different BCEP specialists during the past two years volunteered praise for the continuity of services to the school even with the staff changes. Two other principals noted changes of BCEP staff plus circumstances such as the 1975 teachers strike as detrimental to the development of career education in their schools. The most detrimental factor mentioned in one form or another by each of the principals, however, is what one of them labled as "the closing-out syndrome." The generally held view of both teachers and principals appears to be that BCEP services will not be available to the schools after June 30, 1976. Whether this is in fact the case is immaterial. It is the assumption on which most of those using the project's services are operating and as such does serve to minimize the degree of commitment from those users. As one principal expressed it, "Things could really develop if we were sure it (BCEP) will be around, but it's doubtful."

b. BCEP Staff Interviews

During this visit, I was able to spend approximately an hour privately with each of the BCEP professional staff members with the exception of one member. who was attending an out-of-town conference. Each of these interviews covered the same general areas but as was true for the principals' interviews, because the approach was an informal one, the topics were not always covered in the same sequence during each interview. Five basic areas were discussed during the interviews and each of these is summarized below. It must be noted that this reporting reflects how the staff perceives the various topics and it is those perceptions, be they be reality based or not, which do provide a basis for actions.

1. Intra-staff relationships and communications---

The BCEP staff is working in a milieu of uncertainty and competition which appears to be engendering a fair amount of hostility which in turn is disruptive to the overall functioning of the project. At a time when a united front would be most desirable, there appears to be little group planning and there is little indication of project-wide cooperative efforts.

2. Program Development---

The staff continues to expend effort in the schools, but they are working against the prevalent teacher's attitude that "things are over." The staff continues to view itself as too spread out (see point 3 below) and if the program is continued the move to an ongoing program, it should be marked by focusing on a very limited number of schools until an in-depth program is developed and infused into the instructional program of that limited number of schools for real impact.

3. If continued--what next?---

As has been noted previously, the staff as a group is not optimistic concerning BCEP's future. It is therefore a real tribute to the group that they are still able to consider plans for the future. Their suggestions regarding BCEP's development fall into the two broad categories of program development and administration.

a. Move away from specific activities and "hand outs" toward building an articulated K-12 program through a concentration on the infusion approach;
b. Retrench and develop a full program in a limited number of schools maintaining proven services such as the inservice program, speaker program, and the visiting day program while concentrating on program development; and
c. To NED's knowledge, in the beginning the BCEP itself was not involved in a series of inservice experiences. NED views such experiences as highly desirable and if the BCEP is to continue, we strongly recommend that the administration provide the project staff itself with a common inservice program.

In the broad category of administration there are three suggestions.

a. In NED's judgement, program administration and organization should be more clearly defined in writing with the responsibilities of the project director and the central office administration as related to BCEP more fully delineated than is true in the current job descriptions;
b. The specialists should be provided with more detailed written job descriptions which specify their duties and responsibilities and which provide an indication of the objectives each is expected to accomplish; and
c. A strong supportive statement from the superintendent and a clearly supportive policy statement from the Board of Education is viewed as essential if a fully developed and articulated career education approach is to become a reality in Bristol.

4. Closing-out Activities---

The staff appears to be resigned to the probability that formal career education efforts in Bristol are in their last weeks. As one staff member stated, "The program has been doomed from the start, but we've had some real successes." There were, however two positive suggestions offered by the staff for the remaining two months if these are indeed the final two months of the BCEP. These suggestions are

a. Get into the record an accurate history of the project focusing on both the good and bad things that have happened. Such a record, of course, will be available in the form of the project's final report which will include input from all staff members and in NED's final report. However, a separate document could be very helpful for other projects in Bristol and elsewhere and the staff may wish to consider preparing one; and
b. De-emphasize specific activities and work intensively with key teachers for the rest of the year. It was suggested that this intensive work concentrate on the infusion process as representing the best chance for maintaining career education in Bristol's classroom without project support.

5. Central Administration---

At this point-in-time, the BCEP staff as a group tends not to view the central administration positively. They feel that the central office is responsible for unnecessary roadblocks and regulations and has lacked consistency in dealing with the project staff. They cite the setting of seemingly arbitrary deadlines such as an April 1 cut-off date for encumbering money. Correctly or incorrectly, they view the central administration as non-supportive toward the project and lacking in openness and honesty in their dealings with the staff. They feel that the decision to not fund the project has been made in fact but not shared with the staff and have had this viewpoint reinforced through newspaper articles and during their dealings with school and community people. As noted above, whether these perceptions are based in reality or represent unfounded rumor, they still provide the framework from which the staff members tend to operate. If the situation is not reality based, then more open lines of communication are needed and if the superintendent could spend some time in open dialogue with the staff, it could do much to mitigate the current situation.

In summary, the staff continues to function and to perform their duties. In terms of their attitudes, however, the uncertainty of the project's future is having considerable negative impact for most of them. A definite decision, be it to continue or to discontinue the project, is needed to alleviate this uncertainty.

III. NEXT STEPS

Ms. Judith Thompson and Ms. Deborah Bonnet will be working in Bristol April 28-30. On April 28, they will work with those grade 3, 6, and 8 experimental and control group teachers who will be administering the COB, Careers Orientation Battery, during early May.

On April 29-30 they will be testing in eight experimental and four control kindergarten classrooms. We ask that two control groups and one experimental group be scheduled each half day. UNDER NO CIRCUMSTANCES are Ms. Thompson and Ms. Bonnet to know whether they are dealing with an experimental or a control group.

In addition, Ms. Thompson would like to spend some time with Mr. Matt reviewing Resource Center and library records and with Ms. Matt reviewing her records.

Finally, NED will appreciate receiving a list of teachers to whom the second round of teacher questionnaires (Forms A, B, and C) have been distributed.

Memorandum for: THE RECORD

cc: R. Edmondson
NED Staff

Subject: April 28-30 Site Visit

Date: May 5, 1976

Reference: Grant No. OEG-73-5301

From: Deborah Bonnet
Judith Thompson

The purpose of the subject site visit was two-fold.

1. Two teacher workshops were held on Wednesday, April 28 at the Southside Elementary School. The groups involved were those third grade (morning session) and sixth, seventh, and eighth grade (afternoon session) teachers asked to administer the NED developed Careers Orientation Battery (COB). The purposes of these sessions were to acquaint the teachers with the COB and answer any questions that they had concerning the instrument or its administration.

2. Based on the Bristol Career Education Project's and several kindergarten teachers (see NED Memo · to Mr. Edmondson dated March 19, 1976) request, twelve kindergarten classes were involved in a kindergarten evaluation. It should be noted that this particular evaluation was NED's first attempt at any type of kindergarten evaluation. The approach utilized was that of using a "simulated guest speaker" (Judie Thompson) with an observer (Debbie Bonnet). In addition to recording information such as student reactions, questions, etc. we trust that all students involved were subject to a good career education experience.

A separate report for the above kindergarten project will be forthcoming.

Both of us would like to take this opportunity to thank the entire BCEP staff for their hospitality. It was a rewarding three days.

P. S. Bristol's Kindergarteners are terrific--"Kids say the darnest things!"

Memorandum for: THE RECORD

cc: Ms. Bonnet, NED
Mr. Edmondson, BCEP

Subject: May 20-21, 1976
Site Visit

Date: May 22, 1976

Reference: Grant No. OEG-73-5301

From: Fred Gannon

The primary purpose of this site visit was to pull together information from the BCEP files to be used in the third-party final report. Ms. Thompson and I did spend the better part of the two days we were on site doing this. By and large, the project records are in usable form and, as always, Ms. Thompson and I found the project staff cooperative and very helpful.

The overall situation at the project and the staff feelings appear basically unchanged from those noted in my site report dated April 30.

APPENDIX B

Summary of Community Survey

BRISTOL CAREER EDUCATION PROJECT
"Pentrating School Strata Through Career Education"

Community Survey
Interim Summary

prepared by:
New Educational Directions, Inc.
Crawfordsville, Indiana 47933
November 29, 1975

The Bristol Career Education Project staff (BCEP) and New Educational Directions, Inc. (NED) jointly developed a questionnaire designed in two parts. Part A was intended to assess the extent to which community representatives endorse various career education objectives. Part B was designed to obtain a rough index of the strength of that support by asking one question on the expected outcome of those objectives and one question concerning financial support for career education services. Part A of the questionnaire identified 24 career education objectives which the BCEP staff judged to be appropriate for their project. Items were not limited to those which the staff felt would yield a positive response from the group surveyed. For example, items concerning values, self-awareness, and self-respect and which are frequently viewed by segments of the general population as areas outside of the schools responsibilities were included in the questionnaire.

On November 13, 1975, a copy of this questionnaire was released to 280 individuals in the Bristol area who are on the project's resource list. Within seven working days and without any follow-up mailings, 43% of the group had returned questionnaires to NED. This is an unusually high rate of return for a mail questionnaire without follow-up. It is on this initial return that this interim report is based. It was the intention of the BCEP and NED staffs to do a follow-up mailing in December and after returns from that mailing were received to issue a revision of this report. However, no firm decision has been made concerning the follow-up mailing and the consistency of those responses which have been received may argue against the cost effectiveness of additional efforts of this nature.

Of those individuals responding, the overwhelming number indicated support for the 24 career education objectives presented with three-quarters or more of the respondents agreeing with each of the 24 objectives.

A summary of these results is presented as Table I. The magnitude of those agreeing with the 24 objectives was somewhat surprising. In the Bristol area at least, there seems to be little doubt that the schools should be involved in activities directed at all of these 24 objectives. As a matter of fact, five of the respondents took time to criticize the questionnaire as being "self-serving" and biased. One respondent indicated, "There is actually no other way to answer these comments but agree."

Indeed, there were only three items in Part A with which less than 80% of the respondents were in agreement. Two of these three items (2 & 17) were concerned with what were considered by the questionnaire developers as relatively "non-controversial" topics, placement services for school leavers and helping ". . . elementary school students realize that they will one day have jobs of their own." The third item (19) was considered as a potentially controversial item and the respondents seem to indicate that approximately a quarter of them do not support the tenet that schools should, ". . . develop the concept that people should be open to changing their occupation at any point in their life."

Three of the respondents indicated through comments such as " . . . the best career ed is one involving volunteers from local business and industry," that business and industry participation is essential to career education. One other individual indicated that "Since Bristol has a guidance department, I feel this could be incorporated in their function." Another indicated that what generally is called career education is in reality just a natural part of "growing up."

In commentaries relative to the question, Part B, concerning the financial aspects of career education, three respondents indicated that such activities should be supported in part or in whole by businesses since they are one of the beneficiaries of a good career education program: one individual indicated that it is the parent's responsibility to finance the future of their son or daughter: one indicated that additional funds should not be required because " . . . the above material can be covered in subjects already offered . . ." (infusing career education into subject matter is a major strategy for BCEP): and one respondent indicated "these funds should be allocated by the board of education in exactly the same manner as for any curriculum."

Three of the respondents offered comments for program improvement. "One fault with the career education program stems from idealistic situations for a rewarding job with many hopes and few disappointments stressed. Overconfidence results and the individual is dissillusioned." "A coordinator of career education should not just dump his students 'in the lap' of an unsuspecting worker and expect the proper career education to result. I think the career education department should do more to educate both students and job worker as to just what the student is expected to learn: counselor should be aware of just what the student is learning." "May I add that I sincerely feel that the typical teacher and school system today lacks the ability to effectively perform the items above. Either they must be rotated into the business community for practical work experience or the business community should be paid to teach career education to our students. The academic environment and its people, professional as they claim to be are not qualified to take on such an endeavor." Finally, one individual offered this advice," Do not let higher education people get control of all aspects of career work. Most business people and tradesmen are to some degree educational rebels or dropouts. What we have today is a result of down to earth hands-on people. Give this field to educators and they will soon make Phd's and Master's degrees necessary to do any work in the training area and soon we will have people so highly trained that the jobs available are of no challenge."

TABLE I
BRISTOL CAREER EDUCATION PROJECT
COMMUNITY SURVEY

Summary of Responses as a Percent of Total Responses

Percent responding without follow-up by November 24, 1975 = 43% (N = 123)
Number released = 280
Key: D = Disagree N = No opinion A = Agree O = Omit

Part A

The following items describe some of the objectives of what we call "career education." With this in mind, please respond to the following statements.

	Percent of Respondents			
	D	N	A	O
Schools should make every effort to . . .				
1. . . . help interested high school students find part-time jobs or volunteer work.	08	05	86	--
2. . . . provide a central placement service for graduates and school leavers.	15	11	73	01
3. . . . teach students how to find out about job openings.	02	--	97	01
4. . . . teach students how to fill out a job application.	02	01	97	--
5. . . . teach students how to write a resume.	04	02	94	--
6. . . . teach students how to conduct themselves during a job interview.	04	02	93	--
7. . . . keep students up-to-date on labor market trends or on those fields which show the greatest opportunities for the future.	04	07	87	--
8. . . . show students ways in which reading, math, and other specific school subjects will be essential to them in work.	--	02	98	--
9. . . . make students aware of the large variety of jobs people do.	--	08	92	--
10. . . . help students understand that most jobs involve a large variety of tasks and responsibilities.	01	07	85	--
11. . . . make students aware of the types of job opportunities available in the Bristol area.	02	05	94	--
12. . . . help students learn as much as possible about the occupations that interest them.	02	02	96	--

		D	N	A	O
13.	. . . provide students with the opportunity to observe people at work on various jobs.	03	09	96	--
14.	. . . provide students with the opportunity to talk to people about their jobs.	01	06	94	--
15.	. . . help students understand their own values (e.g., money, leisure time, job responsibilities) which should be considered in choosing a career.	02	07	92	--
16.	. . . help students understand their own interests and abilities which should be considered in choosing a career.	02	07	92	--
17.	. . . help elementary students realize that they will one day have jobs of their own.	11	14	75	01
18.	. . . help students learn to make good decisions on their own.	01	06	92	02
19.	. . . develop the concept that people should be open to changing their occupation at any point in life.	08	15	76	--
20.	. . . develop students' awareness of their personal responsibilities of their actions.	02	04	94	--
21.	. . . develop the attitude that traditionally male occupations are open to women and traditionally female occupations are open to men.	03	15	81	01
22.	. . . provote the attitude that all work is dignified and all jobs are respectable.	04	03	92	01
23.	. . . help students develop respect for themselves and others and the work that they do.	--	01	98	02
24.	. . . develop the student's ability to act as a leader and to give instructions gracefully.	04	07	95	02

Part B

The above items describe some of the objectives of what we call "career education." With this in mind, please respond to the following statements.

1.	It seems to me that a person who has participated in a career education program may be a better employee than one who has not.	11	08	81	01
2.	If career education services are to be continued in our schools, funds will be needed for instructional materials, special training sessions for our teachers, staff salaries, and program coordination. I consider such funds devoted to career education as a sound investment.	09	10	77	04

APPENDIX C

Summary of Principals; Survey

BRISTOL CAREER EDUCATION PROJECT
"Pentrating School Strata Through Career Education"

Principals' Survey
Interim Summary

prepared by:
New Educational Directions, Inc.
Crawfordsville, Indiana 47933
November 28, 1975

In order to obtain an index of how one key group of Bristol school administrators view the Bristol Career Education Project (BCEP), a building principals' survey was developed. This eight item instrument was jointly developed by the BCEP staff and New Educational Directions, Inc., (NED) in order to assure that the items included were appropriate to the BCEP program. The questionnaire was released by the project on November 13, 1975, to the fourteen Bristol building principals who are receiving services from the project. Within six working days, two senior high school and eight K-8 or elementary principals had responded (71% response). The responses and the comments of these ten individuals are summarized as Table I.

In general, the responding principals appear to be positive toward the BCEP's efforts and nine of the ten of them indicated they would like to see their teachers more involved in career education (item 5).

Nine of them indicated that the amount of time spent by the specialists in their schools was sufficient to fulfill the project's objective of familiarizing teachers with career education concepts and activities (item 3). Only seven of them, however, felt the amount of time the specialist was available was sufficient to fulfill the project's objective of providing career education concepts and activities for students (item 4).

The options for item 2 were intended to be integrated, separate, and both rather than yes, no, and undecided. In production, however, the yes, no mode which was appropriate for the other seven items was used thereby making the response uninterpretable. Therefore, only the comments are reported for item 2.

Although the principals as a group tend to be positive toward career education as a concept, their willingness to commit a portion of their school's budget for career education materials and/or services is not overwhelming. Even those six principals who indicated that they would be willing to so commit a portion of school budget, did not do so without qualifying their willingness (see comments, item 8). It appears that while the principals endorse the concept, if the BCEP is going to move from project status to program status within the Bristol schools, it will probably only be accomplished with the financial support of the central administration.

TABLE I
BRISTOL CAREER EDUCATION PROJECT
PRINCIPALS SURVEY

Summary of Responses as a Percent of Total Responses

Percent responding without follow-up by November 21, 1975 = 71% (N = 10)
Key: Y = Yes N = No U = Uncertain O = Omit

Items	Y	N	U	O	Comments
1. Have career education services been available long enough (1½ years) for you to judge the impact of career education on your students and teachers?	60	20	20	--	Since program was modified the effects on staff are positive but effects on students is not known. This is my second year at this school. N Quite a significant impact. Y Time is not the problem in making a judgment, the difficulty is measuring the subjective nature of "impact."
2. Do you view career education as a separate program or as an integrated part of the existing curriculum?					It's about a 50-50 proposition at this time. Integrated Separate program (the teachers view it this way)
3. Does the amount of time spent by the specialist in your school fulfill the project's objective of familiarizing TEACHERS with career education concepts and activities?	90	10	--	--	Would like to see a person available continually to motivate and set up experiences for students. This year 1 day per week. Our specialist is a very capable person. Just beginning under the new system. Just for this year not in the past.
4. Does the amount of time spent by the specialists in your school fulfill the project's objective of providing STUDENTS with career education concepts and activities?	70	20	10	--	The impact on students is less certain. Time is not the problem in making a judgment, the difficulty is measuring the objective nature of "impact." Just beginning under the new system. More time desired. Could do more with more time available, but 1 full day is better than last years hour or two weekly.

Items	Y	N	U	O	Comments
5. Would you like to see your teachers involve more career education in their instructional program?	90	10	--	--	Not during Bicentennial year-- Too many other projects. However, this is coming, with more involvement.
6. Has the Career Education Project had a positive impact on your students?	70	10	20	--	First year (CAB) is a target school. Too early to tell. They have been exposed to many career opportunities.
7. Has the Career Education Project had a positive impact on your teachers?	80	--	20	--	Some are highly oriented to Career Ed. Some yes - Some no To about half of the staff. It is beginning to grow. It has had an impact on those teachers who have made use of the program. Teachers this year have been very responsive.
8. Would you endorse devoting a portion of your school budget specifically for career education materials and/or services?	60	--	--	40	Define portion in amount of dollars and then I'd be able to react. My school's budget is very anemic for essentials let alone other materials or services. It is best tied in with the everyday curriculum. Need more budget. I believe it would be difficult to purchase career ed materials or services within the framework of monies made available to me at this time. Yes, but our budget is very limited My budget would have to be larger than recent years to devote a portion of it for career ed.

APPENDIX D

Summary of Staff Opinionnaires

BRISTOL CAREER EDUCATION PROJECT

A SUMMARY REPORT
OF SCHOOL STAFF OPINIONNAIRES

March 19, 1976

The staffs of the Bristol Career Education Project (BCEP) and New Educational Directions, Inc. (NED) jointly developed opinionnaires for assessing the attitudes towards career education held by teachers, counselors, and administrators in the BCEP project area. Slightly different forms were administered to elementary, junior high, and senior high school educators during January and February, 1976. BCEP completed its second year as an operational program at that time. A total of 377 completed opinionnaires were received from 13 schools, as shown below:

Elementary Schools	
Mt. View	11
Edgewood	22
Hubbell	17
West Woods	12
C.T. O'Connell	21
C.A. Bingham	13
M.A. Callen	13
Southside	23
TOTAL	132
Junior High Schools	
Memorial	43
West Woods	15
Northeast	31
TOTAL	89
Senior High Schools	
St. Paul	44
Bristol Central	57
Bristol Eastern	55
TOTAL	156

Each form contained an item (#21 on Table I) indicating whether the respondent had utilized BCEP services and provided the basis for individual assignments to groups used in data analyses. "BCEP users" were distinguished from "non-users" on this basis alone and therefore the extent of users' contact with BCEP may vary greatly.

Of those surveyed, 68% of elementary teachers, counselors, and administrators have utilized BCEP services; 40% of junior high school and 62% of senior high school staff members have done so.

Responses to each item are shown in Table I by level and BCEP use. Since the three forms are very similar, comparisons of attitudes of elementary, junior high and senior high school staff can be made on most items, as well as comparisons of those who have utilized services to those who have not.

Total scores were also computed and are presented in Table II. Only items which directly address the respondent's attitudes towards career education were added to the total scores.

The total scores of BCEP users were higher than the total scores of non-users at each level, and all differences were statistically significant at the .05 confidence level. Although the magnitude of differences is not dramatic, BCEP does appear to have had a positive impact on school personnel with respect to career education.

Since forms were not identical at all levels, caution should be taken in comparing elementary, junior, and senior high staffs on the basis of total scores. However, the trend seen in total scores is also borne out in response patterns to many of the common items. BCEP senior high school educators are, as a group, somewhat more positive towards career education than junior high staffs. This result is inconsistent with the rule-of-thumb, "the higher the level, the more resistant to career education," which has been noted time and again throughout the nation and may reflect BCEP's emphasis at this level.

The generally positive attitudes of BCEP's secondary school personnel are demonstrated well in item 9: "There is not enough class time to teach career education." Although this is a widely-held attitude of secondary educators, only 22% of BCEP high school staff agreed with the statement, as compared to 28% at the elementary level and 39% of junior high school staff. This item shows large and positive differences between BCEP users and non-users at all levels.

The BCEP staff has very effectively dismissed the common belief that career education is little more than occupational information (item 11) and has conveyed the value of talking to workers as a means of learning about the world of work (item 10). Contact with BCEP has also implanted awareness of the need to counteract the societal influence of sexual stereotyping which limits the occupational choices of women. Indeed, BCEP users responded to virtually all items in a more positive way than did non-users.

Progress is certainly being made towards instilling positive attitudes towards career education, but, as would be expected, there is still room for improvement at all levels as the BCEP moves into its third year of providing services to Bristol's students and teachers.

TABLE I

BRISTOL CAREER EDUCATION PROJECT

SCHOOL STAFF SURVEY

Responses to each opinionnaire item are shown as the percentage of persons in each group. BCEP users were distinguished from non-users on the basis of responses to item 21 below. The number in each group is

Elementary BCEP users	90
non-users	42
Junior High BCEP users	36
non-users	53
Senior High BCEP users	96
non-users	60

Except where otherwise noted, A = agree, D = disagree, N = no opinion, and O = omit. The "desirable" response to each item is starred.

1. Career Education should first be introduced in:
   a. early elementary school
   b. late elementary school
   c. middle school or junior high
   d. high school
   e. never

	A*	B	C	D	E	O
Elementary						
BCEP users	79	13	7	1	--	--
non-users	71	17	7	2	--	2
Junior high school						
BCEP users	50	19	19	--	--	11
non-users	42	25	25	6	--	4
Senior high school						
BCEP users	36	14	26	20	--	4
non-users	27	8	42	20	--	3

2. Properly executed (pre-planning and follow-up activities) Career Education field trips are well worth the time and money spent on them.

	A*	D	N	O
Elementary				
BCEP users	96	--	4	--
non-users	86	2	12	--
Junior high school				
BCEP users	86	8	3	3
non-users	77	--	19	4
Senior high school				
BCEP users	89	1	8	2
non-users	92	2	7	3

3. College-bound students need Career Education as much as others.

	A*	D	N	O
Elementary				
BCEP users	100	--	--	--
non-users	90	5	5	--
Junior high school				
BCEP users	97	3	--	--
non-users	92	4	2	2
Senior high school				
BCEP users	97	2	1	--
non-users	95	2	--	3

4. Career Education results in a tracking of students to meet manpower needs.

	A	D*	N	O
Elementary				
BCEP users	26	40	29	6
non-users	26	36	31	7
Junior high school				
BCEP users	25	28	39	8
non-users	25	32	36	8
Senior high school				
BCEP users	24	41	30	5
non-users	18	43	32	7

5. Our society is changing so fast that any Career Education we give students now will be useless by the time they're ready for employment.

	A	D*	N	O
Elementary				
BCEP users	3	90	6	1
non-users	12	79	7	2
Junior high school				
BCEP users	6	83	8	3
non-users	6	75	13	6
Senior high school				
BCEP users	6	88	5	1
non-users	3	83	5	8

6. Our school system should try to send as many students to college as possible.

	A	D*	N	O
Elementary				
BCEP users	11	81	4	3
non-users	14	79	5	2
Junior high school				
BCEP users	11	75	11	3
non-users	2	85	8	6
Senior high school				
BCEP users	9	80	9	1
non-users	13	78	7	2

7. A good Career Education program requires instructional materials, field trips, and other costly resources.

	A	D*	N	O
Elementary				
BCEP users	41	50	6	3
non-users	36	57	5	2
Junior high school				
BCEP users	50	42	3	6
non-users	38	45	11	6
Senior high school				
BCEP users	61	30	5	3
non-users	637	40	15	8

8. Career Education results in students being forced to make decisions about their future at too early an age.

	A	D*	N	O
Elementary				
BCEP users	4	90	6	--
non-users	12	88	--	--
Junior high school				
BCEP users	3	94	3	--
non-users	2	87	9	2
Senior high school				
BCEP users	3	91	4	2
non-users	10	75	10	5

9. There is not enough class time to teach Career Education.

	A	D*	N	O
Elementary				
BCEP users	28	63	7	2
non-users	38	45	14	2
Junior high school				
BCEP users	39	50	6	6
non-users	43	32	21	4
Senior high school				
BCEP users	22	68	7	3
non-users	35	50	12	3

10. A student can benefit from talking to a person about his or her job, even if that particular job is of little interest to the student.

	A*	D	N	O
Elementary				
BCEP users	97	2	1	--
non-users	86	10	5	--
Junior high school				
BCEP users	89	8	3	--
non-users	85	6	4	6
Senior high school				
BCEP users	92	5	3	--
non-users	80	8	10	2

11. Career Education involves a lot more than learning about jobs.

	A*	D	N	O
Elementary				
BCEP users	94	2	3	--
non-users	71	7	10	12
Junior high school				
BCEP users	92	3	3	3
non-users	75	9	9	6
Senior high school				
BCEP users	92	3	5	--
non-users	73	5	10	12

12. I feel a particular responsibility to make my female students aware of the variety of opportunities open to them.

	A*	D	N	O
Elementary				
BCEP users	63	18	19	--
non-users	40	14	36	10
Junior high school				
BCEP users	67	14	17	3
non-users	36	23	28	13
Senior high school				
BCEP users	60	15	18	7
non-users	37	27	28	8

13. Individual counseling should be available as a part of helping students with career planning.

	A*	D	N	O
Elementary				
BCEP users	89	4	6	1
non-users	74	14	2	10
Junior high school				
BCEP users	92	3	6	--
non-users	79	6	6	9
Senior high school				
BCEP users	93	5	2	--
non-users	87	2	2	10

14. Activities designed to develop students' self awareness usually violate the students' privacy.

	A	D*	N	O
Elementary				
BCEP users	3	91	6	--
non-users	7	57	24	12
Junior high school				
BCEP users	3	89	6	3
non-users	9	66	17	8

15. Family, friends, and chance are such strong influences on a person's career choice that what the school does in Career Education will probably have little effect on a student's future.

	A	D*	N	O
Elementary				
BCEP users	4	89	4	2
non-users	12	71	7	10
Junior high school				
BCEP users	14	64	19	3
non-users	15	66	8	11

16. I think that including Career Education activities in the curriculum can improve student achievement in the content areas.

	A*	D	N	O
Elementary				
BECP users	62	13	24	--
non-users	48	10	33	10
Junior high school				
BCEP users	64	11	17	8
non-users	53	9	28	9
Senior high school				
BCEP users	65	10	23	2
non-users	55	13	20	12

17. Assisting students in defining their values is in part the school's responsibility.

	A*	D	N	O
Elementary				
BCEP users	88	4	8	--
non-users	76	5	10	10
Junior high school				
BCEP users	92	3	--	6
non-users	91	--	2	8
Senior high school				
BCEP users	96	2	3	--
non-users	87	2	2	8

18. If I had had Career Education as a youngster I may have made better decisions at some points in my life.

	A*	D	N	O
Junior high school				
BCEP users	58	22	17	3
non-users	45	30	23	2

19. Would you like to become (more) involved with career education services in the future? a. yes b. not sure c. no

	A*	B	C	O
Junior high school				
BCEP users	36	44	14	6
non-users	28	42	23	8

20. Career Education is another educational fad and will pass from the scene.
a. Yes, it is unfortunate b. Yes, it should c. No

	A	B	C*	O
Junior high school				
BCEP users	36	3	53	8
non-users	26	4	55	15

21. For the past 2½ years the Bristol Career Education Project has been funded by the Federal government. Are you aware of the project's activities and services?
a. Yes, have used them b. Yes, have not used them
c. Vaguely, have not used them d. No

	A*	B	C	D	O
Elementary					
BCEP users	100	--	--	--	--
non-users	--	62	21	--	17
Junior high school					
BCEP users	100	--	--	--	--
non-users	--	49	38	2	11
Senior high school					
BCEP users	100	--	--	--	--
non-users	--	45	32	12	12

22. Has the project influenced your classroom practices?
a. Yes, directly b. Yes, indirectly or incidently c. No

	A*	B	C	O
Elementary				
BCEP users	48	41	10	1
non-users	7	31	48	14
Junior high school				
BCEP users	28	50	22	--
non-users	--	30	55	15

TABLE II

Total average scores

Mean scores are expressed as the percent of "desirable" responses to items reflecting attitudes towards career education.

Elementary form items 1-17, seen in Table I were scored.

Junior high form: 19 items were scored--numbers 1-18 and 20.

Senior high form: items 1-13, 16, and 17 were included in the score, for a total of 15.

Group	N	Mean	Range	t
Total Elementary	132	76	6-100	3.45
BCEP users	90	80	35-100	$p < .001$
non-users	42	68	6-100	
Total Junior High	89	63	16-100	2.10
BCEP users	36	67	50-100	$p < .05$
non-users	53	61	16-100	
Total Senior High	156	71	27-100	3.14
BCEP users	96	74	27- 93	$p < .01$
non-users	60	66	27-100	

APPENDIX E

A Summary Report

Of Teacher Ouestionnaires

BRISTOL CAREER EDUCATION PROJECT

A SUMMARY REPORT
OF TEACHER QUESTIONNAIRES

June, 1976

The staffs of the Bristol Career Education Project (BCEP) and New Educational Directions, Inc. (NED) jointly developed questionnaires to assess the amount and quality of assistance received from BCEP as reported by participating teachers. The instructional staff who were requested to complete these questionnaires were selected by BCEP staff members as representing teachers with whom they had worked extensively during the past 2½ years. The fact that the teachers were hand-picked by BCEP staff should be considered when drawing conclusions about the overall effectiveness of BCEP in the school district since teachers not actively involved with the project were not included in this sampling.

Three different forms of the questionnaires were administered to elementary, junior high, and senior high school teachers during March, 1976. Of the 120 questionnaires distributed to the various teachers, a total of 71 usable forms were returned to NED. It should be noted that these questionnaires were returned directly to NED in postage-paid envelopes, and the BCEP staff was not provided an opportunity to see the completed questionnaires. The percent of return from each group of teachers is reported below in Table I.

TABLE I

PERCENT OF TEACHER RESPONSE TO QUESTIONNAIRE

Form--Group	Number Sent	Percent Received
A--Elementary	35	57*
B--Junior high	7	43
C--Senior high	78	62**
Total	120	59

* One elementary teacher completed Form B (junior high school) instead of Form A (elementary school). The questionnaire had to be dropped from the sample.

**Some high school teachers completed Form B instead of Form C (senior high school). Since, however, only one item differed on the two forms, the six duplicate items were combined for this report and were reported for Form C.

Since only 57%, 43%, and 62% of the elementary, junior high, and senior high school teachers, respectively, returned the questionnaires to NED, caution must be exercised when interpreting the results. The "missing 41%" of the total number received could, but not necessarily would, substantially change the reported response patterns.

FORM A: ELEMENTARY SCHOOL TEACHERS' QUESTIONNAIRE (TABLE II)

The overwhelming majority of responding teachers indicated BCEP was providing "just enough" assistance in the various areas (70% /#5/ to 95% /#1/). The quality of these services was also rated quite high (55% /#5/ to 85% /#4/ indicated excellent).

All of the responding elementary teachers who indicated for item #1 (Suggesting specific techniques you can use to carry out career education in your department, school, and/or classroom.) that they received just the right amount of assistance also tended to rate the quality of this assistance as excellent. One teacher commented that the quality was only fair in this area because the "experience of available staff was not in Early Childhood Education." This same teacher also stated which workshops proved most beneficial to her and why, "Teacher education workshops that were run by teachers were one of the best received projects which BCEP has undertaken. Having one teacher tell and show another 'I did this, it was successful, here's how I did it' is usually much more successful than suggestions coming from outside the classroom."

While no one felt the staff did 'too little" suggesting of specific techniques, 10% indicated "too little" assistance in actually developing strategies and materials (item #2). One teacher commented, "The co-ordinator was very willing to help but was spread between too many schools."

The help provided by the BCEP staff in identifying and providing materials such as films and filmstrips (items #3 & 4) was indicated as being of the right amount and of fairly high quality. This was the only area where one teacher felt the project provided too many materials. One teacher commented on the limited quantity available, "Funding of materials for elementary in general and primary specifically was not proportionate to the amount of children serviced. I think more materials of a permanent nature could have been purchased for this level--films, filmstrips, etc."

Identification of resources such as guest speakers and career exploration day sponsors (item #5) is where the "just enough" response decreased. The quality of this service was also slightly lower than on other items. One teacher indicated that a reason why identifying of resources was limited was because the BCEP staff member was not at the school enough.

Many of the teachers took time to write additional comments about career education generally and BCEP specifically. A representation of these elementary teachers' comments follows.

> The only sad note to be echoed may be the swan song for such a necessary and relevant program. The city's failure to recognize the value of Career Education to young people is the only problem.
>
> . . . . The project at times lacked continuity which made it an "ify" project at times. If we knew what schools we (would) be servicing or if we knew how much money we'll be allotting

for next year gave one the feeling that this was not a project (that) was going to offer these specific services for the 3 years of the project. Because of limited staffing and material funding at my level I feel the success of the project at this level depended on the interest and initiative of the teachers involved. The workshops were a positive force in awakening this interest.

I have especially enjoyed workshops provided by career ed, on both affective and career education. . . .

Career Ed is vital to students in this day and age when so many have so little contact with their parents. Many have no idea what their parents do for a living.

. . . . Through it (BCEP), my primary children have grown to be more aware of themselves, and the feelings of others. Doing self-awareness, has certainly helped many children overcome their adverse feelings. I am very happy with the results of the program--anything that works is great!!

My experience and that of my pupils has been very worthwhile. The BCEP has provided us with many opportunities that we would have not had without this program!

FORM B: JUNIOR HIGH SCHOOL TEACHERS' QUESTIONNAIRE (TABLE III)

Only three of the seven junior high school teachers who were sent a questionnaire returned it to NED. With such a small number, drawing any defensible conclusions is virtually impossible.

Two items, however, showed a response pattern different from the other four items on the questionnaire. The amount of assistance in identifying materials and resources (item #4) was indicated as "too little" by one teacher, and two teachers responded "too little" to clarifying the relationship between career education concepts and present subject curricula (item #6).

One teacher comments on BCEP, "I hate the thought of not having Career Ed resources next year. I hope something can be done to maintain this area of education."

FORM C: SENIOR HIGH SCHOOL TEACHERS' QUESTIONNAIRE (TABLE IV)

The percent of teachers responding that BCEP has been providing "just enough" assistance remained fairly constant for items #1-6 (81% /#4 & 6/ to 88% /#3/). There were, however, approximately 10% of the teachers who felt they did not receive enough assistance from the project (8% /#4 & 5/ to 13% /#1 & 2/). The quality of the services provided by BCEP appears to be somewhere between "excellent" and "fair." Three teachers even commented that a rating should have been provided between these two points such as "good."

Item #1, suggesting specific techniques you can use to carry out career education in your department, school, and/or classroom, received the lowest quality rating of the first six items. One teacher wishes the BCEP staff had suggested more activities rather than getting most of the ideas from other teachers. "Most

suggestions were drawn from faculty rather than Career people themselves, though a booklet was developed for each discipline and distributed." However, most of the responding teachers did indicate having received enough assistance. They liked the lists of job opportunities in their field and the help in developing career units.

The majority of the teachers commented very favorably to the amount and quality of assistance in the areas of identifying and providing materials and resources (items #3-6). The comments regarding these areas express why the teachers rated these items high.

> (item #4) Given many possibilities and freedom to select and used the ones desired and fitted to a particular class.
>
> Several film strip series that were useful in classroom were purchased for the program. Also several field trips had the transportation paid for by Career Ed.
>
> Shadowing program for class, field trips, AV material, value worksheets.
>
> (item #5, excellent) *Best part of program helped me in classroom.
>
> We have had excellent cooperation as far as the Career program providing transportation and making those arrangements for us. Our career director has wisely left some of the contacts with field trip sights to the teacher requesting the trip. It simplifies setting dates and times.

Some teachers, however, did express a lack of assistance in the areas of materials and resources. One teacher comments, "No suggestions ever came. The only arrangements ever made through Career Ed was calling a bus company after I made all of the field trip arrangements. Career Ed person is seldom accessible.' Another teacher made similar comments, "He has not made himself available. There was no follow-up on suggestions given to him. Consequently, I am my own 'resource' person. . . ."

Nine of the high school teachers were inadvertently given the wrong form to complete so item #7 is based only on the 39 teachers returning Form C. It appears this area received the least attention of those covered on the questionnaire because it had the lowest "just enough' and "excellent ratings and the highest "too little" rating. One teacher indicated that they worked with separate career units rather than trying to relate and infuse career education concepts and activities into the regular content area objectives.

A representation of the additional comments by high school teachers follows.

> Excellent career specialist in our Building--consultant's name--went out of her way to help the classroom teacher--was always available--had interesting & useful ideas--did the job 100%+. My students benefitted from this program--and isn't that what it is all about!
>
> Students were introduced to the Career education resource area and helped whenever possible by the career education people.
>
> Career Ed has made my subject area more relevant to my students.

BCEP is the best program for exposing students to the world of work in the school system.

Career education is a great idea. Should be started in lower grades (6th-7th), maybe even lower. Has been helpful to me and my students.

. . . . the materials and resources available in the Foreign Language Field are rather limited.

CONCLUSION

The responding teachers in all three groups appear generally to be satisfied with the amount and quality of assistance they have received by the BCEP staff. They feel the project has been an asset to the students and the community as well as to themselves.

TABLE II

BRISTOL CAREER EDUCATION PROJECT
FORM A: ELEMENTARY SCHOOL TEACHERS' QUESTIONNAIRE
Responses Expressed in Percent
(N = 20)

	Amount of Assistance		Quality of Assistance	
1. Suggesting specific techniques you can use to carry out career education in your department, school, and/or classroom.	--	too much	70	excellent
	95	just enough	25	fair
	--	too little	--	poor
	5	not applicable	5	not applicable
2. Assisting you in developing your career education strategies and materials.	--	too much	65	excellent
	80	just enough	25	fair
	10	too little	--	poor
	10	not applicable	10	not applicable
3. Identifying materials (e.g., films, etc.) useful to you.	--	too much	70	excellent
	90	just enough	25	fair
	5	too little	--	poor
	5	not applicable	5	not applicable
4. Providing materials useful to you.	5	too much	85	excellent
	85	just enough	15	fair
	10	too little	--	poor
	-	not applicable	--	not applicable
5. Identifying resources (e.g., guest speakers, career exploration day sponsors, etc.) useful to you.	--	too much	55	excellent
	70	just enough	20	fair
	5	too little	--	poor
	25	not applicable	25	not applicable
6. Providing resources useful to you.	--	too much	80	excellent
	85	just enough	10	fair
	5	too little	--	poor
	10	not applicable	10	not applicable

TABLE III

BRISTOL CAREER EDUCATION PROJECT
FORM B: JUNIOR HIGH SCHOOL TEACHERS' QUESTIONNAIRE
Responses Expressed in Percent
(N = 3)

	Amount of Assistance		Quality of Assistance	
1. Clarifying the objectives and philosophy of career education.	--	too much	67	excellent
	100	just enough	33	fair
	--	too little	--	poor
	--	not applicable	--	not applicable
2. Suggesting specific techniques you can use to carry out career education in your department, school, and/or classroom.	--	too much	33	excellent
	67	just enough	33	fair
	--	too little	--	poor
	33	not applicable	33	not applicable
3. Assisting you in developing your career education strategies and materials.	--	too much	67	excellent
	100	just enough	33	fair
	--	too little	--	poor
	--	not applicable	--	not applicable
4. Identifying materials and resources (films, guest speakers, etc.) useful to you.	--	too much	33	excellent
	67	just enough	33	fair
	33	too little	33	poor
	--	not applicable	--	not applicable
5. Providing materials and resources useful to you.	--	too much	33	excellent
	100	just enough	67	fair
	--	too little	--	poor
	--	not applicable	--	not applicable
6. Clarifying the relationship between career education concepts and present subject curricula.	--	too much	33	excellent
	33	just enough	--	fair
	67	too little	33	poor
	--	not applicable	--	not applicable
	--	omit	33	omit

TABLE IV

BRISTOL CAREER EDUCATION PROJECT
FORM C: SENIOR HIGH SCHOOL TEACHERS' QUESTIONNAIRE
Responses Expressed in Percent
(N = 48)

	Amount of Assistance		Quality of Assistance	
1. Suggesting specific techniques you can use to carry out career education in your department, school, and/or classroom.	--	too much	56	excellent
	83	just enough	35	fair
	13	too little	4	poor
	2	not applicable	--	not applicable
	2	omit	4	omit
2. Assisting you in developing your career education strategies and materials.	2	too much	65	excellent
	83	just enough	29	fair
	13	too little	6	poor
	--	not applicable	--	not applicable
	2	omit	--	omit
3. Identifying materials (e.g., films, etc.) useful to you.	--	too much	71	excellent
	88	just enough	21	fair
	10	too little	6	poor
	2	not applicable	2	not applicable
	--	omit	--	omit
4. Providing materials useful to you.	--	too much	65	excellent
	81	just enough	23	fair
	8	too little	4	poor
	8	not applicable	8	not applicable
	2	omit	--	omit
5. Identifying resources (e.g., guest speakers, career exploration day sponsors, etc.) useful to you.	--	too much	73	excellent
	83	just enough	15	fair
	8	too little	4	poor
	6	not applicable	2	not applicable
	2	omit	6	omit
6. Providing resources useful to you.	2	too much	60	excellent
	81	just enough	29	fair
	10	too little	4	poor
	4	not applicable	2	not applicable
	2	omit	4	omit
7. Clarifying the relationship between career education activities and content area objectives. (N = 39)	--	too much	54	excellent
	67	just enough	21	fair
	15	too little	5	poor
	15	not applicable	15	not applicable
	3	omit	5	omit

APPENDIX F

Representative Newspaper Articles

BRISTOL, CONN. PRESS, Friday, March 7, 1975

Career Education Program Praised

Charles R. Pieterse, project director of the World of Work, a program in Peterborough, N.H., visited the Bristol school system this week and said he was greatly impressed with the spirit of the teachers and the youngsters involved in Bristol's career education program.

"Bristol seems to exhibit the interest and has the kind of dedicated educators needed to make it work," said Pieterse.

He noted that he was especially impressed with the career resource center and the West Woods School Mall. He called these projects "the types of things you read about, but seldom see."

Pieterse called Bristol's projects "great." He expressed hope that the program will continue.

Wednesday, October 23, 1974

Sonstroem Talk Stresses Career Education Trends

Walter R. Sonstroem, director of employee relations at Superior Electric Company, was guest speaker at the meeting of the Advisory Council Work Experience Program. This program is being conducted in each of the three high schools in Bristol.

Sonstroem indicated that trends in education have changed to the extent that today the emphasis is on career education. In the future more and more jobs in industry will not require a college education, but technical training.

In reporting on a recently held Vocational Education meeting held in Hartford, attended by representatives of both education and manufacturers to discuss the training of young persons in the field of vocational education, he stated that: "Young persons need improvement in basic skills because those presently coming from public schools were inappropriately trained in computational skills and instrument reading skills."

There was also concern for students who were guided toward college only to drop out and also for students not receiving information about manufacturing careers. This lack of guidance has a tendency to develop young persons with poor attitudes, he said. Sonstroem also offered these observations:

There appears to be a great need to inform pupils, teachers and parents of the career job opportunities available in manufacturing.

Great concern was expressed for a joint cooperative effort by educators and manufacturers in revising and updating vocational curricula.

It was further pointed out that great benefits are derived from work experience programs where students spend time in the plant learning skills and a wider use of these work experiences

Sonstroem continued: "We must recognize that the majority of jobs in years ahead will not require a college education. The U.S. Office of Education estimates that four out of five jobs, or 80 per cent of the jobs created in the 70's, will require vocational or technical training but not a college diploma. In addition, nearly 60 per cent of the products to be made in the 1970's had not even been invented in 1969. The U.S. Department of Labor pointed out the fact that, by the year 2000, only 26 years from now - two - thirds of today's kindergarten students will fill jobs which haven't been "invented" yet.

"In the year 1980, only six years away, 30,000 types of jobs will be available as opposed to 21,000 types of jobs today.

"We must, therefore, come up with extensive plans to develop the necessary curriculum in our schools that will prepare our youth for those 30,000 jobs that will be available in 1980."

Sonstroem serves as vice president of the Bristol Chamber of Commerce and is chairman of the Chamber's Business - Industry - Education Committee.

Students Get 'Tryouts' In Various Fields

By SHARON LEA SPERLING

A new career guidance program has become an intricate part of Bristol's Career Education Program. The exploratory program allows students to "try out," in a limited manner, a variety of conditions in various professional fields.

Students are placed in a job they are interested in for one or more days. The instructor is the employer and the student serves as the employe. However, no exploitation of the students is allowed.

The exploratory program allows students to get first hand job information concerning a variety of careers. The program is particularly effective in professional fields. Students in the program explore the fields of medicine, dentistry, law, engineering, photography, teaching, broadcasting, journalism and many other careers.

The realistic examination of careers enables students to not only receive a first hand view of a job but, in addition, it can motivate students toward specific career goals.

Students choose from the following job categories: Agri-business and natural resources, business and office positions, communications and media, construction, consumer and home - making jobs, environment professionals, fine arts and humanities, health, hospitality and recreation, manufacturing, marine science, marketing and distribution, personal services, public services and transportation.

The program, according to career ed director Robert Edmondson, also gives employers and educators the opportunity to work together to keep Bristol youth working in Connecticut.

Students in grades seven through 12 are eligible to explore the job market and are advised to do so through the guidance of the career education offices.

For further information students or employers may call the career ed office at 589-1028.

secretary for Attorney Charles L. Furey, explains her job to students Cheryl Kolopzien (l) and Kathy Zozikowski.

Bristol Press Photos by Phyllis Springer

112

Greger Seeks Support For Career Education

EDITOR'S NOTE: This is the sixth in a series of profiles on present commissioners seated on Bristol's nine - member Board of Education.

By SKIP LeMONNIER

Newly - appointed Board of Education Commissioner Gerald J Greger makes no bones about his current consuming educational interest — saving the school system's career education program.

Federal money, which for three years has funded the career education program entirely, runs out June 30 so Greger has been stumping for financial support from the Board of Finance and his school board colleagues to pick up the expenses in the 1976-1977 fiscal year.

"I've been spending most of my time in this area," Greger readily admits, "because it is of such vital concern due to the budget." The finance board Thursday gave the school board $13,354,742 or 98 per cent of its budget request, yet that still leaves $323,312 in requested programs without funds. The career education program was targeted for approximately $90,500 of that money so its status is still up in the air.

Greger persists, though. "I firmly believe in the program because I feel it is a definite trend in education. It is definitely here to stay in one form or another."

The 38 - year old graduate of Jennings School, Bristol High School (1955) and the University of Connecticut (1959) is generally student oriented in his school board pursuits.

"In the past I feel the students have been shortchanged," Greger says, "for whatever reasons — budget, negotiations and other things. I'd like to put more emphasis on what's available for the students and work toward an improvement of the general educational atmosphere between teachers, students, supervisors, administrators and the Board of Education.

GERALD J. GREGER

"Too often everyone is at odds with each other instead of cooperating toward the same objectives," he explains.

Greger is not entirely new to public life. In 1975 he filled out a term on the Democratic Town Committee and is presently a vice chairman and director of the United Way fund drive. Greger is also a vice president and director of the Bristol Chamber of Commerce and acts as chairman of the business, industry and education committee.

Greger is Secretary - Treasurer of Phelan, Greger and Campbell, Inc., insurance and real estate agents, and holds the rank of Major in the U.S. Army Reserves. He also served on active duty from 1960 to 1963 in Germany at the rank of 1st Lieutenant.

Though he knows "what board members are asked to absorb is monumental," Greger "actively sought" a school board post from Mayor Henry J. Wojtusik. "I wanted to participate rather than observe," he said, acknowledging he "expressed an interest four years ago" in serving on the board.

He finds the school system, at this early point in his term, "encouraging," particularly its "receptiveness to the new board. We are vitally and sincerely interested in education and we are getting our teeth into things like Title IX and the deterioration of buildings. The members are finding out things for themselves."

Greger himself serves on the athletics and activities, executive, finance, grievance, negotiation and personnel committees of the school board.

Greger resides at 52 Oakwood Circle with his wife, the former Katrinka Craw, and their four children: Michael, 15, a sophomore at Eastern High School; Jeffrey, 14, an eighth grader at Memorial Boulevard School; Suzanna, 10, a fifth grader at Jennings School; and Peter, 6, in kindergarten at Jennings. The Gregers attend the First Congregational Church.

113

EDUCATION DISCUSSION: Supt. of Schools Dr. William F. Rowe, Chamber of Commerce President Edward P. Lorenson, Board of Education Chairman Patrick J. Sullivan and school board member and moderator Gerald J. Greger gathered for an informal discussion prior to the Chamber's annual Business - Industry - Education Seminar held Wednesday night at Chippanee Golf Club to discuss the status of career and special education programs in the city.

Bristol Press Photo By Peter Maronn

Pitch Made To Retain Career Education

By SKIP LeMONNIER

The career education program in the Bristol school system, funded completely by federal grants over its three funding in the 1976-1977 fiscal year.

The program is in danger of being completely eliminated. Federal grants provided

F. Rowe also strongly supported retaining the program. "It had done a fantastic job the past three years and we should seriously consider keeping it."

saying "why didn't we keep the program back in '76.' "

Moderator and school board member Gerald Greger, a strong supporter of the career education program, allowed it

APPENDIX G

December 1, 1975

Interim Evaluation Report

Interim Evaluation Report

for

Penetrating School Strata Through

Career Education

Project No. V361170

Grant No. OEG-0-73-5301

December 1, 1975

A. INTRODUCTION AND OVERVIEW

On October 14, 1975, New Educational Directions, Inc. (NED) was informed that on the basis of a competitive bidding procedure, it had been retained to serve as the third-party evaluator for the Bristol Career Education Project (BCEP), "Penetrating School Strata Through Career Education," during its third year as a Federally-funded project. On October 22, 1975, a NED representative made the first site visit to the project. Since that time, a NED person has spent a total of five person days on site working directly with project staff. Those five days have been devoted primarily to identifying an evaluation design and to developing and/or identifying instrumentation acceptable to both the project staff and to NED. An extremely cooperative staff has made excellent contributions in both of these areas. NED has also observed the operations (process evaluation) of the project during site visits and has recorded these observations with the project director through two memoranda dated October 27, 1975, and November 17, 1975.

On the basis of NED's observations and the data available from the evaluation reports of the former third-party evaluator, it appears that the project has advanced toward accomplishing its original goals, that a viable career education program is emerging in a number of Bristol's public and parochial schools, and that emerging program is traceable directly to the efforts of the BCEP staff. The BCEP is apparently having a direct and positive influence on the attitudes of teachers and on the development of Bristol's young people. In addition, the

results of a questionnaire which was jointly developed by BCEP and NED indicates strong concurrence with the project's objectives by key community representatives. This same survey also indicates strong support for the program from this group and the local UAW, Bristol Chamber of Commerce, and other community agencies are on record as endorsing the BCEP's efforts.

B. GENERAL DISCUSSION

The BCEP can be viewed as serving four basic audiences. These audiences are students, teachers, community, and Bristol school administrative and supervisory personnel. The project as it relates to each of these audiences will be discussed briefly. A fifth group, the project staff, will also be discussed.

1. Services to Students: Project records indicate that during the 1974-75 academic year the BCEP provided Bristol's young people with opportunities to participate in 273 exploration day and 87 field trip experiences designed to foster a greater understanding of themselves as they relate to the world outside of the classroom and/or how the classroom relates to that world. During the same period, in response to teacher requests the project scheduled 216 guest speakers for the classrooms of Bristol. These services plus extensive inservice and consulting services for Bristol teachers and the providing of appropriate materials presumably have resulted in improved educational experiences for Bristol's young people. Indeed, by the end of the project's second year, the third-party evaluator reported that, "The results of the 'Career Maturity Inventory' indicate that Bristol students are much more mature about their career choices and future options than are students nationally."

Student growth in the areas covered by the project's objectives will be assessed in the spring of 1976 for grades 1-8 using a control group design wherever possible. This should provide a defensible base for judging the impact career education can have on student performance.

The project has initiated a system for aiding school leavers in finding employment. As yet, the system is only minimally operational and is not coordinated with other placement efforts within the school or community.

2. Services to Teachers: A 9-12 Curriculum Guide was developed by the project and had been widely distributed to Bristol's teachers by the end of the 1974-75 year. Already during the 1975-76 year additional units have been jointly developed by BCEP staff and classroom teachers for grades 1-6. Inservice activities for teachers at each grade level (1-6) have been scheduled in cooperating schools and these half-day sessions have already commenced. The project also

makes quantities of career-education-oriented materials available to teachers K-12 through the Resource Center and its satellites.

During the project's first two years a full-time career education specialist was available to each of Bristol's senior high schools, grades 7-8 were served by two full-time specialists, but one specialist was serving all grades 1-6. For the third year, two decisions were made which were very well advised in NED's judgment. First, eight elementary schools were identified where more than 80% of the faculty were willing to make a concrete commitment to career education and the project decided to focus its elementary school efforts on those eight schools. Second, staff were reassigned so that each of the target elementary schools could receive specialist services one full day a week. Each specialist has provided each elementary school being served with a "sign up" procedure to encourage maximum utilization of the specialist by the school's staffs.

At the end of the second year, based on a "Teachers' Practices Survey," the third-party evaluator stated: "The results of the instrument indicate that:

(1) Teachers understand Career Education;
(2) Teachers would not like to see Career Education taught as a separate concept;
(3) The Career Education specialists and other staff are highly visible and active in their schools;
(4) Career infusion has occurred in some schools, but not in others."

3. Bristol Community: The Board of Education acts as the community's appointed representatives and are the policy makers for the schools. To NED's knowledge, this group has yet to make a policy statement concerning the place of career education in Bristol education. Without such a statement, full community endorsement cannot be considered as having been achieved.

On November 13, 1975, however, a questionnaire which had been jointly developed by BCEP and NED was released to the 280 individuals in the Bristol area who are on the project's resource list. As a group, these individuals evidenced their support of the project's efforts in three ways.

(1) Within seven working days and without any follow-up mailings, 43% of the group had returned the questionnaires to NED;
(2) Approximately 15% of those responding took the time to write extensive comments on the questionnaire form and/or unsolicited letters of support for the project's efforts; and
(3) Of those individuals responding, the overwhelming number indicated support for career education objectives. Three-quarters or more of the respondents agree with every one of the twenty-four career education objectives. Approximately 77% of the respondents also indicated that they would consider devoting funds for career education support services as a sound investment. (See Attachment A for a detailed interim summary of the responses to this questionnaire.)

It does appear that there is a nucleus of support for career education in the community with this group.

4. Bristol School Administrative and Supervisory Personnel: At the end of the project's second year, the third-party report indicated, "Some statement, both public and within the Bristol Public School community, should be expressed by the administration. The Project is notable for the lack of this visible administrative support." As was indicated relevant to the Board of Education, without such a statement the project cannot be considered an "unqualified success."

The NED representative has, however, had an opportunity to speak at some length with one senior high school principal, one elementary school principal, and a central office supervisor during recent site visits. In all three cases, on the basis of this admittedly limited and probably biased sampling, these individuals were extremely supportive of the project's efforts and laudatory regarding its services.

A brief questionnaire was distributed to the fourteen building principals with whom the project is working closely. After only six working days, and without any follow-up work, 71% (N = 10) of those principals had responded. Of those responding, 60% indicated that they would be willing to devote a portion of their school budget for career education materials and/or services. Three of the four other principals indicated that budgets were too limited already and the fourth indicated that portion would have to be defined as a dollar amount before he could respond. (See Attachment B for a detailed interim summary of responses to this questionnaire.)

The project appears to be building a base of administrative support at the level where its services are most concentrated. Evidence is not yet available to NED, however, which indicates administrative support for the project's efforts at all levels nor by all administrators at any level.

5. Project Staff: The project staff appear to be a group of hard-working individuals, each of whom has a unique set of strengths to contribute to the development of career education in the Bristol schools. These individual strengths should be used each to complement the other within the project's framework. The project administrator has recognized the desirability of developing a teamwork approach for the project and in September of 1975 took steps to encourage such teamwork. Specifically, he established a schedule for staff members to shadow each other and scheduled a staff meeting each month for the staff to share their plans and accomplishments with each other. These provide excellent

opportunities for the staff to obtain the understandings which are a prerequisite for the team approach. Needed next, however, are some specific plans from the project staff concerning how a Bristol Career Education Program which will reflect all of their unique contributions will evolve from their individual efforts.

The project staff are now keeping a time log of their activities. These records will provide a more detailed description of specific activities toward which their energies are being directed.

III. INTERIM SUMMARY

At this point in time, the project appears to be making admirable progress toward its stated goals as it builds on its strengths. From the indicators available, it is serving all of, but receives varying degrees of support from, its major audiences.

APPENDIX H

Careers Orientation Battery (COB)

Bristol Edition

Description of the Careers Orientation Battery (COB)

Form 3

Part	Items	Scale Name	Career Education Objective
I	24	Technology	The student will understand the interrelatedness of various jobs.
II	21	Self Esteem	The student will develop a positive attitude toward him/herself.
III	16	Attitudes toward Work	The student will develop desirable work attitudes.
IV	28	World of Work	Students will be aware of the requirements for and nature of various jobs.

Form 6

I	22	Technology	Students will understand the influence of technology on American society.
IIa*	21	Self Esteem	The student will develop a positive attitude toward him/herself.
IIb	19	Attitude toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
III	28	Attitudes toward Work	Students will develop desirable work attitudes.
IV	15	Decision-Making Skills	Students will develop career decision-making skills.
V	33	World of Work	Students will be aware of the requirements for and nature of various jobs.

*Part II includes items from both the self esteem and attitudes toward school scales.

Form 8

Part	Items	Scale Name	Career Education Objective
I	19	Attitude toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
II	30	Attitude toward Work	Students will develop desirable work attitudes.
III	15	Decision-Making Skills	Students will develop career decision-making skills.
IV	44	World of Work	Students will be aware of the requirements for and nature of various jobs.

Prepared by: NEW EDUCATIONAL DIRECTIONS, Inc. (NED)
Box 307
Crawfordsville, Indiana 47933

CAREERS ORIENTATION BATTERY (COB)
Form 3
- experimental edition -

Name: _____ Boy Girl

School: _____ Teacher's Name: _____

PART I

Directions: Your teacher will read the following questions aloud while you read them to yourself. This morning Mary woke up, brushed her teeth, washed her face, got dressed, made her bed, ate breadfast, and rode the bus to school. Put a check mark (✓) next to ALL of the workers who helped make these things possible.

____1. Bus driver	____6. Garage mechanic
____2. Grocery store clerk	____7. Plumber
____3. Assembly line worker	____8. Sign maker
____4. Truck driver	____9. Seamstress
____5. Chemist	___10. Insurance agent

Imagine that you have a wooden pencil. Put a check mark (✓) next to ALL of the workers who were necessary to make the pencil.

___11. Forester	___15. Designer
___12. Carpenter	___16. Saw mill hand
___13. Miner	___17. Farmer
___14. Lumber jack	

Put a check mark (✓) next to ALL of the workers who help your school run.

___18. Politician	___21. Writer	___24. Principal
___19. Tax collector	___22. Salesman	
___20. Mailman	___23. College professor	

PART II

Directions: Your teacher will read each of the following questions aloud while you read them to yourself. For each question, please draw a circle around the answer that is BEST FOR YOU.

SAMPLE: Do you like to receive expensive gifts?
(Yes) No

If you like to receive expensive gifts, you would circle YES. This is NOT a test, but please try to be as honest as you can. If you have any questions, please raise your hand and the teacher will help you.

1. Do you forget most of what you learn?
Yes No

2. Do your classmates usually pay attention to what you say?
Yes No

3. Would you rather look someone else?
Yes No

4. Would you rather be someone else?
Yes No

5. Do you often wish you didn't have to grow up?
Yes No

6. Do you get upset if you are not chosen to be a group leader?
Yes No

7. Do you like to be alone sometimes?
Yes No

8. Do you feel bad when people laugh at your mistakes?
Yes No

9. Are there some things you do better than most of your friends?
Yes No

10. Do grownups often talk with you?
Yes No

11. Do you generally like the way you look?
Yes No

12. Do most children have more friends than you?
Yes No

13. Do you expect to be a success in life?
Yes No

14. Do you express your anger?
Yes No

15. Do you like to do things that are hard for you?
Yes No

16. Do most of your classmates like you?
Yes No

17. Do you ever cry?
Yes No

18. Do you believe that if at first you don't succeed, you should try something else?
Yes No

19. Do you think most people admire you?
Yes No

20. Do you look forward to growing up?
Yes No

21. Do grownups often listen to your ideas?
Yes No

PART III

Do you agree or disagree with the following statements?

1. You may change jobs many times during your lifetime.
Agree Disagree

2. A person who has worked for a company for more than 5 years should never by fired.
Yes No

3. A student is a worker.
Agree Disagree

4. A wife is always successful if her husband has a good job.
   Agree Disagree

5. I look forward to having a regular job when I grow up.
   Agree Disagree

6. A boss should compliment workers who come to work on time every day and obey all the company rules.
   Agree Disagree

7. A boss should compliment workers who do extra good work.
   Agree Disagree

8. People should expect to enjoy their jobs.
   Agree Disagree

9. If you try hard enough, you can have ANY kind of job you want.
   Agree Disagree

10. The only reason to work is to get paid.
    Agree Disagree

11. A housewife is a worker.
    Agree Disagree

12. A boss should fire workers who don't do a good job.
    Agree Disagree

13. Everyone should want to do some kind of work.
    Agree Disagree

14. Both men and women can have interesting jobs.
    Agree Disagree

15. Different jobs make different people happy.
    Agree Disagree

16. A person's income tells you how successful he or she is.
    Agree Disagree

PART IV

Directions: Your teacher will read each of the following questions aloud while you read them to yourself. For each question, please draw a circle around the answer you think is the best answer.

SAMPLE: Where does a broadcaster work?
a. A supermarket
(b) A radio station
c. A garage

A broadcaster works in a radio station, so (b) is circled. This is NOT a test, but please try to do as well as you can.

1. Who does NOT usually wear a uniform?
a. A waitress
b. A stewardess
c. A secretary

2. Who works in an office?
a. A file clerk
b. A dispatcher clerk
c. A check-out clerk

3. Do all engineers drive trains?
a. Yes
b. No

4. Who works at night MOST often?
a. A physical therapist
b. A public health nurse
c. An orderly

5. Who does NOT have to know about insects?
a. A forest ranger
b. A garbage collector
c. An exterminator

6. Who works with adults?
a. A teacher
b. A librarian
c. Both a and b

7. Can a boy become a nurse?
a. Yes
b. No

8. Who spends the MOST time alone?
   a. A lathe operator
   b. A truck driver
   c. An accountant

9. Who has to have a pleasant voice?
   a. A news broadcaster
   b. A newspaper reporter
   c. A news analyst

10. Do most actresses make a lot of money?
    a. Yes
    b. No

11. Who works in a hotel?
    a. A bell hop
    b. A surveyor
    c. Both a and b

12. Who spends the MOST time outdoors?
    a. A horticulturist
    b. A botanist
    c. A nurseryman

13. Who has to go to school the longest?
    a. An architect
    b. An interior designer
    c. A commercial artist

14. Can a girl become a doctor?
    a. Yes
    b. No

15. If you like to draw, what would be a good job for you?
    a. A photographer
    b. A fashion designer
    c. A potter

16. Who is MOST likely to work in a factory?
    a. A keypunch operator
    b. An optician
    c. A welder

17. Who helps sick people the MOST?
    a. An X-ray technician
    b. A health inspector
    c. A drugstore clerk

18. Does an assembly line worker work in a factory?
    a. Yes
    b. No

19. Who helps build houses?
    a. An insurance agent
    b. An electrician
    c. A real estate agent

20. Who spends the MOST time talking to people?
    a. A bus driver
    b. A car salesman
    c. A gas station attendant

21. Who has to go to college?
    a. An astronaut
    b. A race car driver
    c. An auto mechanic

22. Who uses math in their jobs?
    a. Scientists and bank tellers
    b. Cooks and painters
    c. Both a and b

23. Who writes alot of reports in their work?
    a. A policeman
    b. A bookkeeper
    c. A mail carrier

24. Who is probably away from home the most?
    a. A detective
    b. A marine
    c. An airline dispatcher

25. Which jobs SHOULD women do?
    a. A teacher or a stewardess
    b. A lawyer or an engineer
    c. Both a and b

26. Who has to be most friendly?
    a. A receptionist
    b. A secretary
    c. A telephone operator

27. Who has the MOST dangerous job?
    a. A security guard
    b. An airline pilot
    c. A coal miner

28. Which jobs SHOULD men do?
    a. A hairdresser or secretary
    b. A mechanic or pilot
    c. Both a and b

The CAREERS ORIENTATION BATTERY was prepared by New Educational Directions, Inc., Crawfordsville, Indiana under contract with the Careers Resource Project, Huntingburg, Indiana (Grant No. OEG-0-73-5312--Part D of Public Law 90-576.) This form has been modified for use in the Penetrating School Strata Through Career Education Project, Bristol, Connecticut (Grant No. OEG-73-5301--Part D of Public Law 90-576.)

Prepared by: NEW EDUCATIONAL DIRECTIONS, Inc. (NED)
Box 307
Crawfordsville, IN 47933

CAREERS ORIENTATION BATTERY (COB)
Form 6
- experimental edition -

Directions: Please read each of the following questions carefully. On the separate answer sheet, draw a circle around the letter of the answer you think is the best answer. Do NOT mark on this booklet.

> SAMPLE: Which is the largest automobile manufacturer in the United States?
> a. Ford Motor Company
> b. American Motors
> c. General Motors Corporation
> d. Chrysler Corporation

General Motors is the largest automobile manufacturer so "C" has been circled on your separate answer sheet. This is NOT a test but please do as well as you can. Answer all questions as honestly as possible.

PART I

Technology is new applications of knowledge, which usually makes workers depend upon each other.

1. It takes less time to build an automobile today than it did when the first automobiles were built. Which ONE of the following is the main reason for the increased speed in car production?
   a. People work faster today than before.
   b. Many cars are produced on assembly lines.
   c. More people want cars today than before.

2. Technological change in the computer industry has resulted in
   a. More workers needing retraining.
   b. Higher prices of computer equipment.
   c. Fewer jobs in the computer industry.

The following statements name some changes that have occurred in the American Society since 1900. Which changes have been influenced by technology?

3. People go grocery shopping less often.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

4. Most people go to school longer.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

5. People have more free time.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

6. More women work outside the home.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

7. Some kinds of animals can no longer be found alive today.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

8. There are more large companies.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

Imagine that you have a wooden pencil. Which of the following workers were necessary to make the pencil?

9.	Forester	a. Yes	b. No
10.	Carpenter	a. Yes	b. No
11.	Miner	a. Yes	b. No
12.	Lumber jack	a. Yes	b. No
13.	Designer	a. Yes	b. No
14.	Saw mill hand	a. Yes	b. No
15.	Farmer	a. Yes	b. No

Which of the following workers help your school run?

16.	Mayor	a. Yes	b. No
17.	Tax collector	a. Yes	b. No
18.	Mailman	a. Yes	b. No
19.	Writer	a. Yes	b. No
20.	Salesman	a. Yes	b. No
21.	College professor	a. Yes	b. No
22.	Principal	a. Yes	b. No

CONTINUE ON TO PART II

PART II

There are no correct or incorrect answers to questions in Part II. Please answer honestly.

1.	Do you forget most of what you learn?	a. Yes	b. No
2.	Do you feel left out at school?	a. Yes	b. No
3.	Do your classmates usually pay attention to what you say?	a. Yes	b. No
4.	Would you rather look like someone else?	a. Yes	b. No
5.	Do you use what you learn at school when you are at home?	a. Yes	b. No
6.	Is recess the best part of school?	a. Yes	b. No
7.	Do you think most of the things you learn in school are really important?	a. Yes	b. No

8.	Would you rather be someone else?	a.	Yes	b.	No
9.	If you don't understand something your teacher says, do you usually ask her to explain it?	a.	Yes	b.	No
10.	Do you often wish you didn't have to grow up?	a.	Yes	b.	No
11.	Do you get upset if you are not chosen to be a group leader?	a.	Yes	b.	No
12.	Do you like to be alone sometimes?	a.	Yes	b.	No
13.	Do you feel bad when people laugh at your mistakes?	a.	Yes	b.	No
14.	Are there some things you do better than most of your friends?	a.	Yes	b.	No
15.	Do you like to miss school?	a.	Yes	b.	No
16.	Do grownups often talk with you?	a.	Yes	b.	No
17.	Do you generally like the way you look?	a.	Yes	b.	No
18.	Is it important to you to learn to speak well?	a.	Yes	b.	No
19.	Do you wish you didn't have to go to school?	a.	Yes	b.	No
20.	Do you often read at home when you don't have to?	a.	Yes	b.	No
21.	Do most children have more friends than you?	a.	Yes	b.	No
22.	Do you expect to be a success in life?	a.	Yes	b.	No
23.	Do you usually feel unhappy at school?	a.	Yes	b.	No
24.	Do you express your anger?	a.	Yes	b.	No
25.	Do you like to do things that are hard for you?	a.	Yes	b.	No
26.	Do most of your classmates like you?	a.	Yes	b.	No
27.	Do you think learning about history is a waste of time?	a.	Yes	b.	No
28.	Does it bother you to answer questions in class?	a.	Yes	b.	No
29.	Do you hate to do your homework?	a.	Yes	b.	No
30.	Will you have to use math when you are out of school?	a.	Yes	b.	No
31.	Do you ever cry?	a.	Yes	b.	No
32.	Do you believe that if at first you don't succeed, you should try something else?	a.	Yes	b.	No
33.	Do you often daydream in class?	a.	Yes	b.	No
34.	Do you think most people admire you?	a.	Yes	b.	No
35.	Do you like to skip school?	a.	Yes	b.	No
36.	Do you raise your hand in class very often?	a.	Yes	b.	No
37.	Does school make you feel dumb?	a.	Yes	b.	No
38.	Do you look forward to your future?	a.	Yes	b.	No
39.	Do you usually like school?	a.	Yes	b.	No
40.	Do grownups often listen to your ideas?	a.	Yes	b.	No

CONTINUE ON TO PART III

PART III

Do you agree or disagree with the following statements?

1. A person should be prepared to change occupations several times during his or her lifetime.
   a. Agree
   b. Disagree

2. A worker who's been with a company for a long time should never be fired, even if his performance decreases because the company owes him for years of service and should keep him on until retirement.
   a. Agree
   b. Disagree

3. A housewife is a worker.
   a. Agree
   b. Disagree

4. A student is a worker.
   a. Agree
   b. Disagree

5. A wife is always successful if her husband has a good job.
   a. Agree
   b. Disagree

6. I look forward to having a career.
   a. Agree
   b. Disagree

7. Minority workers should be paid more than others because these groups have been taken unfair advantage of for so many years.
   a. Agree
   b. Disagree

8. It is the employer's responsibility to compliment an employee who comes to work on time every day and obeys all the company rules.
   a. Agree
   b. Disagree

9. It is the employer's responsibility to compliment an employee who does exceptionally good work.
   a. Agree
   b. Disagree

10. People should not expect to enjoy their jobs. As long as they're making a living doing something worthwhile, they should be satisfied.
    a. Agree
    b. Disagree

11. With enough ambition, anyone can do any kind of work he or she wants.
    a. Agree
    b. Disagree

12. Employees with children should be paid more than others because they need more money to support their families.
    a. Agree
    b. Disagree

13. There is no reason for people to work unless they get paid for it.
    a. Agree
    b. Disagree

14. It is the boss's responsibility to the company to fire employees who don't do good work.
    a. Agree
    b. Disagree

15. If an employee does his or her job well, he or she definitely should be promoted to a higher level position.
    a. Agree
    b. Disagree

16. A person's income tells you how successful he or she is.
    a. Agree
    b. Disagree

17. It is society's responsibility to provide everyone who wants to make some money with a job they know how to do.
    a. Agree
    b. Disagree

18. Whether they get paid for it or not, people should do some kind of work because it makes them feel worthwhile.
    a. Agree
    b. Disagree

Does this USUALLY happen when a person does QUALITY WORK? The worker . . . .

19. gets less work done in a day.
    a. Yes
    b. No

20. is disliked by fellow workers.
    a. Yes
    b. No

21. uses time well.
    a. Yes
    b. No

22. has a better chance for a raise.
    a. Yes
    b. No

23. gets longer paid vacations.
    a. Yes
    b. No

24. is more satisfied with his or her job.
    a. Yes
    b. No

25. puts less effort into his or her work.
    a. Yes
    b. No

26. takes shorter lunch breaks.
    a. Yes
    b. No

27. talks to other workers only about business matters.
    a. Yes
    b. No

28. gains self respect.
    a. Yes
    b. No

CONTINUE ON TO PART IV

PART IV

For each of the following pairs, choose the item you think is more important to consider in choosing a future occupation.

1. a. Your sex
   b. Your grades

2. a. Whether your parents can afford to pay for a college education.
   b. Whether you work well in groups.

3. a. The kind of people you like to work with.
   b. Whether you want to be famous for your accomplishments.

4. a. Whether you could find certain kinds of jobs near your hometown.
   b. Whether you would rather work for a big organization, a small one, or for yourself.

5. a. How much money you want to make.
   b. How much you would enjoy doing different jobs.

6. a. What your parents would like you to do.
   b. How you feel about going to college or other training school after high school.

7. a. What your friends plan to do after high school.
   b. How much money you want to make.

8. a. Your skills--how well you do certain things.
   b. Your aptitudes--how quickly you learn certain kinds of things.

9. a. The feeling of worth doing different kinds of jobs would give you.
   b. The amount of responsibility you would have in various jobs.

10. a. The wages you would make when you were hired.
    b. The chances for getting promoted to a higher level position.

11. a. The social position of workers in various jobs.
    b. The amount of leisure time you want to have.

12. a. Whether you want to get married eventually.
    b. Whether you would rather work indoors or outdoors.

13. During the past week, have you thought about what you want to be doing 10 years from now?
    a. Yes
    b. No

14. Is it important for a person your age to think about the kind of job he or she may want after finishing school?
    a. Yes
    b. No

15. When should you make a FINAL decision about what your career will be when you are 40?
    a. When you begin high school.
    b. When you graduate from high school.
    c. When you are in your twenties.
    d. When you are 40.

CONTINUE ON TO PART V

PART V

1. Which of the following has to know the MOST about maps?
    a. Sailor
    b. Truck driver
    c. Topographer
    d. Pilot
    e. Photointerpreter

2. Which of these is the LEAST help to sick people?
    a. Pharmacist
    b. Ecologist
    c. Orderly
    d. Dietician
    e. Psychiatrist

3. Who is usually college-trained?
    a. Fireman
    b. Computer programmer
    c. Salesman
    d. Disc jockey
    e. Computer operator

4. Who would probably NOT hire a nurse?
   a. Navy recruiter
   b. Pediatrician
   c. Large factory
   d. School board
   e. Psychologist

5. Who travels the LEAST?
   a. Commercial pilot
   b. Airline stewardess
   c. Air traffic controller
   d. Airline navigator

6. Who is a salesperson?
   a. Booking agent
   b. Insurance agent
   c. Travel agent
   d. None of the above
   e. a, b, and c

7. Do most actresses make a lot of money?
   a. Yes
   b. No

8. Which of these has LEAST to do with constructing houses?
   a. Glazier
   b. Mason
   c. Interior decorator
   d. Electrician
   e. a and c

9. Which job usually pays the MOST?
   a. Vice-president of a large corporation
   b. Vice-president of the United States
   c. Vice-president of a state university
   d. Supreme Court Justice

10. Who RARELY works at night?
    a. Policeman
    b. Comedian
    c. Telephone operator
    d. Electrician
    e. All of the above often work nights.

11. Who would take the MOST math courses?
    a. Mechanical engineer
    b. Computer programmer
    c. Accountant
    d. Statistician
    e. Industrial engineer

12. Who usually has to go to school the LONGEST?
    a. Legal secretary
    b. Attorney
    c. School teacher
    d. Navy officer

13. What do foresters study?
    a. Computer simulation
    b. Zoology
    c. Botany
    d. b and c
    e. a, b, and c

14. Whose job is probably the LEAST dangerous?
    a. Policeman
    b. Construction worker
    c. Security guard
    d. Coal miner

15. If you like to draw more than anything else, which would be the WORST job for you?
    a. Draftsman
    b. Interior decorator
    c. Optometrist
    d. Architect
    e. Set designer

16. Which job COULD a high school student do while going to school?
    a. Theater usher
    b. Sales clerk
    c. Paper deliverer
    d. Library assistant
    e. All of the above

17. Who spends a lot of time alone?
    a. Truck driver
    b. Lathe operator
    c. Accountant
    d. Fork lift operator
    e. Airline pilot

18. Who would be LEAST likely to live in a small town?
    a. Used car salesman
    b. Electrician
    c. Airline pilot
    d. Newspaper reporter

19. Who HAS to be able to speak well?
    a. Sales clerk
    b. Barber
    c. Policeman
    d. Clergyman
    e. All of the above

20. Who is LEAST likely to study a foreign language?
    a. Flight attendant
    b. Doctor
    c. Lawyer
    d. C.I.A. agent
    e. Ambassador

21. People who graduate from college can always find a job.
    a. True
    b. False

How much education is usually needed to get these jobs?

22. Telephone salesperson
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

23. Salesperson in a department store
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

24. Administrative assistant
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

25. File clerk
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

26. Lawyer
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

27. Teacher
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

28. Plumber
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

29. Mechanical engineer
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

30. Nurse
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

31. Hotel manager
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

32. Forester
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

33. Optometrist
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

The CAREERS ORIENTATION BATTERY was prepared by New Educational Directions, Inc., Crawfordsville, Indiana under contract with the Careers Resource Project, Huntingburg, Indiana (Grant No. OEG-0-73-5312--Part D of Public Law 90-576.) This form has been modified for use in the Penetrating School Strata Through Career Education Project, Bristol, Connecticut (Grant No. OEG-0-73-5301--Part D of Public Law 90-576.)

Prepared by: NEW EDUCATIONAL DIRECTIONS, Inc. (NED)
Box 307
Crawfordsville, IN 47933

CAREERS ORIENTATION BATTERY (COB)
Form 8
- experimental edition -

Directions: Please read each of the following questions carefully. On the separate answer sheet, draw a circle around the letter of the answer you think is the best answer. Do NOT mark on this booklet.

SAMPLE: Which is the largest automobile manufacturer in the United States?
a. Ford Motor Company
b. American Motors
c. General Motors Corporation
d. Chrysler Corporation

General Motors is the largest automobile manufacturer so "C" has been circled on your separate answer sheet. This is NOT a test but please do as well as you can. Answer all questions as honestly as possible.

PART I

There are no correct or incorrect answers to questions in Part I. Please answer honestly.

1.	Do you feel left out at school?	a. Yes	b. No
2.	Do you use what you learn at school when you are at home?	a. Yes	b. No
3.	Is lunch the best part of school?	a. Yes	b. No
4.	Do you think most of the things you learn in school are really important?	a. Yes	b. No
5.	If you don't understand something your teacher says, do you usually ask her to explain it?	a. Yes	b. No
6.	Do you like to miss school?	a. Yes	b. No
7.	Is it important to you to learn to speak well?	a. Yes	b. No
8.	Do you wish you didn't have to go to school?	a. Yes	b. No
9.	Do you often read at home when you don't have to?	a. Yes	b. No
10.	Do you usually feel unhappy at school?	a. Yes	b. No
11.	Do you think learning about history is a waste of time?	a. Yes	b. No
12.	Does it bother you to answer questions in class?	a. Yes	b. No
13.	Do you hate to do your homework?	a. Yes	b. No

14. Will you have to use math when you are out of school? a. Yes b. No

15. Do you often daydream in class? a. Yes b. No

16. Do you like to skip school? a. Yes b. No

17. Do you raise your hand in class very often? a. Yes b. No

18. Does school make you feel unimportant? a. Yes b. No

19. Do you usually like school? a. Yes b. No

CONTINUE ON TO PART II

PART II

Do you agree or disagree with the following statements?

1. A person should be prepared to change occupations several times during his or her lifetime.
   a. Agree
   b. Disagree

2. A person's job isn't all that important because most of the really meaningful things in life are done off the job.
   a. Agree
   b. Disagree

3. A worker who's been with a company for a long time should never be fired, even if his performance decreases because the company owes him for years of service and should keep him on until retirement.
   a. Agree
   b. Disagree

4. A housewife is a worker.
   a. Agree
   b. Disagree

5. A student is a worker.
   a. Agree
   b. Disagree

6. A wife is always successful if her husband has a good job.
   a. Agree
   b. Disagree

7. I look forward to having a regular job.
   a. Agree
   b. Disagree

8. Black employees should be paid more than others because this group has been discriminated against for so many years.
   a. Agree
   b. Disagree

9. It is the employer's responsibility to compliment a worker who comes to work on time every day and obeys all the company rules.
   a. Agree
   b. Disagree

10. It is the employer's responsibility to compliment a worker who does exceptionally good work.
   a. Agree
   b. Disagree

11. People should not expect to enjoy their jobs. As long as they're making a living doing something worthwhile, they should be satisfied.
   a. Agree
   b. Disagree

12. With enough ambition, anyone can do any kind of work he or she wants.
   a. Agree
   b. Disagree

13. Workers with children should be paid more than others because they need more money to support their families.
   a. Agree
   b. Disagree

14. There is no reason for people to work unless they get paid for it.
   a. Agree
   b. Disagree

15. It is the boss's responsibility to the company to fire employees who don't do good work.
   a. Agree
   b. Disagree

16. If a worker does his or her job well, he or she definitely should be promoted to a higher level position.
   a. Agree
   b. Disagree

17. A person's income tells you how successful he or she is.
   a. Agree
   b. Disagree

18. It is society's responsibility to provide everyone who wants to make some money with a job they know how to do.
   a. Agree
   b. Disagree

19. Whether they get paid for it or not, people should do some kind of constructive work because it is their duty as a member of the society.
   a. Agree
   b. Disagree

20. Whether they get paid for it or not, people should do some kind of constructive work because it makes them feel worthwhile.
   a. Agree
   b. Disagree

Does this USUALLY happen when a person does QUALITY WORK? The worker . . . .

21. gets less work done in a day.
    a. Yes
    b. No

22. is disliked by fellow workers.
    a. Yes
    b. No

23. works efficiently.
    a. Yes
    b. No

24. has a better chance for a raise.
    a. Yes
    b. No

25. gets longer paid vacations.
    a. Yes
    b. No

26. is more satisfied with his or her job.
    a. Yes
    b. No

27. puts less effort into his or her work.
    a. Yes
    b. No

28. takes shorter lunch breaks.
    a. Yes
    b. No

29. talks to other workers only about business matters.
    a. Yes
    b. No

30. gains self respect.
    a. Yes
    b. No

CONTINUE ON TO PART III

PART III

For each of the following pairs, choose the item you think is more important to consider in choosing a future occupation.

1. a. Your sex
   b. Your grades

2. a. Whether your parents can afford to pay for a college education.
   b. Whether you work well in groups.

3. a. The kind of people you like to work with.
   b. Whether you want to be famous for your accomplishments.

4. a. Whether you could find certain kinds of jobs near your hometown.
   b. Whether you would rather work for a big organization, a small one, or for yourself.

5. a. How much money you want to make.
   b. How much you would enjoy doing different jobs.

6. a. What your parents would like you to do.
   b. How you feel about going to college or other training school after high school.

7. a. What your friends plan to do after high school.
   b. How much money you want to make.

8. a. Your skills--how well you do certain things.
   b. Your aptitudes--how quickly you learn certain kinds of things.

9. a. The feeling of accomplishment doing different kinds of jobs would give you.
   b. The amount of responsibility you would have in various jobs.

10. a. The wages you would make when you were hired.
    b. The chances for getting promoted to a higher level position.

11. a. The social position of workers in various jobs.
    b. The amount of leisure time you want to have.

12. a. Whether you want to get married eventually.
    b. Whether you would rather work indoors or outdoors.

13. During the past week, have you thought about what you want to be doing 10 years from now?
    a. Yes
    b. No

14. When should you make a FINAL decision about what your occupation will be when you are 40?
    a. When you begin high school.
    b. When you graduate from high school.
    c. When you are in your twenties.
    d. When you are 40.

15. Is it important for a person your age to think about the kind of job he or she may want after finishing school?
    a. Yes
    b. No

CONTINUE ON TO PART IV

PART IV

1. Which of the following has to know the MOST about maps?
   a. Sailor
   b. Truck driver
   c. Topographer
   d. Pilot
   e. Photointerpreter

2. Which of these is the LEAST help to sick people?
   a. Pharmacist
   b. Ecologist
   c. Orderly
   d. Dietician
   e. Psychiatrist

3. What jobs SHOULD women do?
   a. Teacher, nurse, or stewardess
   b. Trucker, mechanic, or carpenter
   c. Doctor, lawyer, or scientist
   d. Any of the above

4. Who is usually college-trained?
   a. Fireman
   b. Computer programmer
   c. Salesman
   d. Disc jockey
   e. Computer operator

5. Who would probably NOT hire a nurse?
   a. Armed Forces
   b. Pediatrician
   c. Large factory
   d. School board
   e. Psychologist

6. Who travels the LEAST?
   a. Commercial pilot
   b. Airline stewardess
   c. Air traffic controller
   d. Airline navigator

7. Who is a salesperson?
   a. Real Estate Broker
   b. Insurance agent
   c. Travel agent
   d. None of the above
   e. a, b, and c

8. Do most actresses make a lot of money?
   a. Yes
   b. No

9. Which of these has LEAST to do with constructing houses?
   a. Bricklayer
   b. Electrician
   c. Interior decorator
   d. Plumber

10. Which jobs SHOULD men do?
    a. Life guard, usher, teacher
    b. Interior decorator, nurse, secretary
    c. Mechanic, engineer, pilot
    d. a and c
    e. Any of the above

11. Who RARELY works at night?
    a. Policeman
    b. Comedian
    c. Telephone operator
    d. Electrician
    e. All of the above often work nights.

12. Whose job is probably the LEAST dangerous?
    a. Policeman
    b. Construction worker
    c. Security guard
    d. Coal miner

13. If you like to draw more than anything else, which would be the WORST job for you?
    a. Draftsman
    b. Interior decorator
    c. Optometrist
    d. Architect
    e. Set designer

14. Which job COULD a high school student do while going to school?
    a. Theater usher
    b. Sales clerk
    c. Paper deliverer
    d. Library assistant
    e. All of the above

15. Who spends a lot of time alone?
    a. Truck driver
    b. Lathe operator
    c. Accountant
    d. Fork lift operator
    e. Airline pilot

16. Who would be LEAST likely to work in a small town?
    a. Used car salesman
    b. Electrician
    c. Airline pilot
    d. Newspaper reporter

17. Who HAS to be able to communicate well?
    a. Sales clerk
    b. Barber
    c. Policeman
    d. Clergyman
    e. All of the above

18. Who is LEAST likely to study a foreign language?
    a. Flight attendant
    b. Doctor
    c. Lawyer
    d. C.I.A. agent
    e. Ambassador

19. People who graduate from college can always find a job.
    a. True
    b. False

Imagine that you have a wooden pencil. Which of the following workers were necessary to make the pencil?

20.	Forester	a. Yes	b. No
21.	Carpenter	a. Yes	b. No
22.	Miner	a. Yes	b. No
23.	Lumber jack	a. Yes	b. No
24.	Designer	a. Yes	b. No
25.	Saw mill hand	a. Yes	b. No
26.	Farmer	a. Yes	b. No

Which of the following workers help your school run?

27.	Politician	a. Yes	b. No
28.	Tax collector	a. Yes	b. No
29.	Mailman	a. Yes	b. No
30.	Writer	a. Yes	b. No
31.	Salesman	a. Yes	b. No
32.	College professor	a. Yes	b. No

For each job name the interest in the second column that is MOST important for the worker to have.

33.	Weather forecaster	a. Helping others.
34.	Carpenter	b. Expressing your feelings and ideas.
35.	Payroll clerk	c. Discovering new explanations of how things work.
36.	Fire fighter	d. Organizing a group of people to get a job done.
37.	Fashion model	e. Seeing the actual results of your work.
38.	Sales manager	f. Accurately organizing detailed information.
39.	Farmer	
40.	Newspaper columnist	
41.	Town mayor	
42.	Actuary	
43.	Physical therapist	
44.	Sociologist	

The CAREERS ORIENTATION BATTERY was prepared by New Educational Directions, Inc., Crawfordsville, Indiana under contract with the Careers Resource Project, Huntingburg, Indiana (Grant No. OEG-0-73-5312--Part D of Public Law 90-576.) This form has been modified for use in the Penetrating School Strata Through Career Education Project, Bristol, Connecticut (Grant No. OEG-73-5301--Part D of Public Law 90-576.)

APPENDIX I

Kindergarten Study

Summary Report

BRISTOL CAREER EDUCATION PROJECT
"Penetrating School Strata Through Career Education"

Kindergarten Study
Summary Report

prepared by:
New Educational Directions, Inc.
Crawfordsville, Indiana 47933
May 1976

Although elementary career education programs are often quite intensive at the kindergarten level, efforts to evaluate the impact of career education rarely include kindergarteners. One reason for this exclusion is that most evaluation strategies utilize paper-and-pencil testing of some type which is an unreliable measurement technique for very young children.

Nevertheless, the Bristol Career Education Project (BCEP) staff and kindergarten teachers have perceived positive influences of career education for five year-olds, and requested NED to make an effort to document these effects. This report describes NED's first attempt at systematically investigating the effects of career education on the behavior of kindergarten students.

Background

The following excerpt from a March 19 report submitted by NED to BCEP shows the origins of the experimental design. NED proposed several evaluation strategies and the BCEP staff chose the simulated guest speaker design for implementation.

> In a February meeting of Mr. Gannon, three BCEP staff, and seven BCEP kindergarten teachers, the behavioral consequences of career education which these teachers have observed in their children were identified. Following are possible strategies for assessing some of these effects.
>
> Each of these approaches involves comparisons of children in career education classrooms to those in more traditional classes and thus requires the cooperation of at least one kindergarten teacher not involved in career education activities. All approaches require careful control of the experimental setting, including the use of the same investigator(s) for all groups. Since judgemental decisions will be made by the investigators, they must be unbiased and should be unfamiliar to all the children included in the study. Investigators who are unaware until the conclusion of the data collection and scoring of which classes are "career education" and which are "control" would be needed.
>
> Outcomes: *Career education children are more aware of the feeling aspects of jobs.
> *Career education children are more inquisitive and free to ask questions.

Evaluation Approach: Simulated guest speaker

Investigator 1 enters the classroom and is introduced by the teacher. He or she says, "Hi, kids! I came to talk to you about my job. I am a _____ (an occupation unfamiliar to the children). What would you like to know about my work?"

The visitor may explain the job briefly before opening the discussion, but should give the same "speech" in all classes in the study. The discussion should be allowed to flow naturally thereafter.

Methods

Ms. Judie Thompson, MED's Director of Administration, was chosen as the guest speaker and Ms. Deborah Bonnet, also of NED, as the observor. Neither Ms. Thompson nor Ms. Bonnet had previously visited Bristol, nor were they aware of which teachers had been involved in BCEP activities. The BCEP staff and teachers were asked to avoid any comments indicating a particular teacher's participation in the BCEP program before, during, or after their classroom visits.

The BCEP staff arranged for twelve classroom visits on April 29 and 30, and distributed the letter explaining the purpose of the visit to participating teachers (see attachment A). Four of these teachers have not been involved with BCEP nor received any project services, the remaining eight have implemented career education throughout the school year with the aid of BCEP services. The kindergarten career education activities focused on increasing self awareness, the feeling aspects of jobs, and increasing tolerance and understanding of each other.

On the basis of the input from the seven Bristol Kindergarten teachers, and after consulting with a kindergarten teacher in Crawfordsville, Indiana, NED developed a guest speaker presentation which was somewhat more structured than originally had been planned. Snapshots of Ms. Thompson performing various job tasks were mounted on cardboard for use as visual aids. Ms. Thompson's presentation was designed to focus on career-education-related points such as the relationship between her job and those of other workers and aspects of her job she particularly likes. The original plan to begin with a speech, then to call for questions was revised so that children could ask questions or make comments at any point during the presentation. Several questions were also asked of the students, including, "Could a man do my job? Why or why not." "Did going to school help me in my job? How?" "What are some things you would like about my job?" "Is there anything you would'nt like about my job?"

Upon entering the classroom, the teacher introduced the visitors and assumed an inconspicuous position with the observer. The childern sat on the floor around the speaker who sat in a low chair. During the presentation, the speaker encouraged any questions or comments relevant to the discussion. Irrelevant lines of conversation (e.g., "We have two telephones at our house") were politely discouraged.

At one point during the presentation, children who believed a man could do the speakers's job were asked to stand. At another point, children who believed

that going to school help the speaker in her job were asked to stand. Although these activities appeared to control restlessness, it became clear that children's responses could not be considered independent of one another and no analysis was performed on "answers" to these question.

Data were collected for twenty minutes after the children were settled and the presentation began. Using a stopwatch and the data collection form in Attachment B, the observer recorded the number of children not attending to the discussion at 4-minute intervals. The original plan to count the number of children participating in the discussion was changed when it was learned that kindergarten children tend to respond en masse, and that 100% participation is virtually assured. Each session was also recorded on cassette tape for later analysis.

The analysis plan also underwent revision in light of data collection experiences. No distinction was made between person and product-oriented questions, and children's answers to the speaker's questions were analyzed. The following analyses were performed by classroom units. The number of questions asked about the speaker's job, the number of reasons the children would and would not like the job, the number of ways school helps in the job, and the proportion of children appearing to attend to the discussion at 2, 6, 10, 14, and 18 minutes after the beginning of the presentation. Only after tapes were transcribed and all analyses were performed on individual classes were the NED staff told which teachers have been involved in the BCEP program.

Results

One comparison class was exceptionally responsive to the presentation, although the other three were clearly less responsive than most career education classes. The reason for this is unknown, but it is possible that the teacher has included career education approaches in her instruction without realizing it. The socioeconomic status of the neighborhood is comparable to that of the other schools included in the study. Furthermore, no differences were noted among various classrooms which could be attributed to socioeconomic status. Since this single classroom in some cases affected the results greatly, the class will be referred to as CA, and differences between comparison and career education classes will be discussed both with CA included and excluded.

The number of job-related questions asked by children in career education classes ranged from 1 to 9, with 5.0 as the average. In the comparison classes, the number of questions ranged from 0 to 14, with an average of 4.5. Even including CA, the greater inquisitiveness in a guest speaker situation of children with career education experience could be inferred. When CA is eliminated, the average number of questions in the comparison classes was only 1.25, as compared to 5.0 in the experimental classes.

Some of the questions qualifying as relevant were: "Why don't you like running machines?" "Why don't you quit?" "How long do you work?" "Do you work at night?" "Do you have to help people?" "Do you help people get jobs?" "Do you get a vacation?" "Do you go outside?" "How much money do you get for about a week?" "What kind of building do you work in?" "Do you talk to other people about careers?" "Do you work hard?" "Why don't you watch the typewriter man fix it so you can learn how?"

After the speaker had described her job, she asked the children at large whether they would like her job, then asked individuals why they felt that way. Career education classes gave from 0 to 6 reasons for liking the job (average = 3.5) and from 0 to 5 reasons for disliking the job (average = 1.88). Comparison classes gave from 0 to 2 positive reasons (average = 1.25) and from 0 to 2 negative reasons (average = .5). The superior performance of career education classes on this question may be attributable to self-awareness activities; children who are aware of their likes and dislikes can better predict their reactions to a given work situation.

Examples of things children would like about the job are:

"I'd like to run the printing machine."

"To talk on the telephone."

"You get to ride on airplanes."

"Because I like people."

"To get some money."

"I'd like to go away a lot."

"Interviewing people."

"It would keep me busy."

"You get a day off."

"You get to type."

"It's fun."

Some responses to the question, "What wouldn't you like about my job?"

"I wouldn't like typewriters."

"The machine makes you get all crummy."

"Going to the Post Office every day."

"Cause you have to write stuff."

"You work too hard."

"Because you have to work at night sometimes."

"I wouldn't like to go on airplanes."

"Too many things to do."

"Because I don't like to go from place to place. I just like to stay home."

"Your job's too long."

"You have to talk too much."

"I don't like that job--it's too hard. I'm going to be a fireman."

When asked how going to school helps Ms. Thompson in her job, career education classes gave from 1 to 4 ways (average = 2.14) and comparison classes from 0 to 7 ways (average = 2.75). When CA is discounted, the average number of reasons was 1.33 per class.

Some of these reasons were:

"You learned to read."

"You learned to count."

"You learned to study."

"You learned to write checks."

"You learned to type."

"You learned to eat right."

"You learned how to get the pencil and paper and stuff like that."

"You learned to try and get a job."

"You learned how to follow directions."

Finally, the attentiveness of career education classes was found to be greater than that of comparison classes. The percentage of children in each class who appeared to be attending to the discussion was computed at each interval then these percentages were averaged for each group.

Percent of Group Attending

	Time in Minutes				
	2	6	10	14	18
Career Education	99%	96%	96%	79%	55%
Comparison	95%	89%	76%	59%	75%

In summary, there is tentative evidence that career education experiences at the kendergarten level have affected children in the following ways:

1. A GREATER INTEREST IN JOBS, MORE OPENNESS WITH ADULTS, AND/OR A BETTER UNDERSTANDING OF THE NATURE OF JOBS AS SEEN IN THE GREATER TENDENCY TO ASK JOB-RELATED QUESTIONS OF A WORKER AND AN INCREASED ATTENTIVENESS TO A GUEST SPEAKER.

2. INCREASED ABILITY TO PROJECT THEMSELVES INTO W WORK ROLE, AS SEEN IN THE REASONS FOR LIKING OR DISLIKING THE JOB.

3. INCREASED AWARENESS OF THE RELATIONSHIPS OF IN-SCHOOL LEARNING TO WORK SITUATIONS.

Finally, many children made humorous or interesting career-related comments which could not be analyzed objectively. A few are presented below and identified by group:

When asked, "Why don't you think a man could do my job?"

"Because a man does better things than a girl does" (ce-boy)

"Because we can fix things better" (ce-boy)

"If his wife couldn't do the job, he would have to. They'd have to get a babysitter" (comparison)

"Cause it's your job." (ce)

"It's a girl's job. Men work somewhere else." (comparison)

"Men can't type" (ce)

"There wouldn't be enough men to do your job." (ce girl)

"You would have to ask your boss if a man could have your job." (ce)

"Because men do their own jobs and women do their own jobs." (comparison)

"A man could do your job because it doesn't make no difference." (ce)

When asked, "If a worker in the company wanted to go somewhere far away, what could I do to help them?"

"You could get them a sleeping bag." (comparison)

"That's not an airplane! That's a whisper jet! and jets don't come to Bristol." (comparison)

"My poppy had to go to school and he's old." (comparison)

"I would like to work for you, because you need help. You have too much to do." (comparison

"My mommy got laid off 'cause I didn't want a babysitter anymore." (ce)

"When I grow up, I'm going to do what my daddy (mommy) does." (At least one in each class.)

NEW EDUCATIONAL DIRECTIONS

Bowker Gannon and Associates Education Projects

BOX 307 CRAWFORDSVILLE, INDIANA 47933 (317) 362-8877

April 16, 1976

Dear

The Bristol Career Education Project has arranged for us to visit your kindergarten class on _____ at _____. The purpose of this visit will be to study the effects of a career education program on children's responsiveness to guest speakers.

Judie Thompson will act as guest speaker, talking about her job as NED's director of administration. Debbie Bonnet will sit behind the children, taking notes and operating a tape recorder.

When we arrive in your classroom, please introduce us to the children, explaining that Miss Thompson is going to talk to them about her job and Mrs. Bonnet is just going to watch.

The discussion will be recorded so we can analyze the kinds of questions children ask. Notes recorded during the session will indicate the number of children participating in the discussion and the number attending to it.

We will collect data for twenty minutes, but we can stay a few minutes longer if the discussion is going well and the children are not restless.

Neither of us knows whether you have been using career education. We want to be objective for the "experiment," so please don't tell us.

Of course, you'll want to tell the children about our visit in advance. Prepare for the visit in your usual way, with only activities you would normally use in preparation for a guest speaker. While we're there, please try not to influence the conversation.

Thank you for agreeing to participate in this study. We look forward to meeting you and your children.

Sincerely yours,

Debbie Bonnet

Deborah G. Bonnet

Judie Thompson

Judith M. Thompson

sr

Simulated Guest Speaker Data

Teacher:_____ School:_____

Date:_____ Time:_____

Number of children present:_____

Tape number:_____

Number not attending:_____

2 min._____ 6 min._____ 10 min._____ 14 min._____ 18 min._____

Participants:	Questions

Could a man do this job? Yes_____

Did school help me? Yes_____

APPENDIX J

Staff Logs

Memorandum for: BOB EDMONDSON

Subject: Summary of Staff Logs Date: April 5, 1976

Reference: Grant No. OEG-73-5301 From: Deborah G. Bonnet

Attached is a table summarizing the percent of time spent by BCEP staff members in various activity categories during the period of October, 1975, to February, 1976.

The largest proportion of recorded time has been devoted to consultation, which is appropriate for a project in its third year. Workshops and administrative tasks have also involved major protions of staff time.

However, the staff logs received by NED are extremely incomplete due to a variety of factors, including BCEP staff turnover. This can be seen in the large variation of total logged hours from month to month. Since available data is incomplete, NED hesitates to draw conclusive implications from the logs, and does not presently plan a more indepth analysis than that presented here.

Due to the difficulties encountered in maintaining staff logs, NED recommends that their use be discontinued at this time.

Summary of BCEP Staff Logs
The percentage of total logged hours by activity category and month

Activity Category	Oct.	Nov.	Dec.	Jan.	Feb.
A. Travel	10.1	7.4	5.0	6.9	6.9
B. Secretarial	4.3	2.8	2.4	9.5	8.2
C. Administration	14.5	20.8	24.7	19.9	9.5
D. Orientation	.5	--	.3	1.1	--
E. Workshop	.7	6.7	16.6	3.9	23.8
F. Consultation	20.5	19.7	14.7	19.0	26.0
G. Observation	5.5	2.9	1.1	1.3	1.9
H. Materials Development	9.9	7.4	5.5	7.1	3.5
I. Student Activity	2.9	4.2	1.5	6.8	5.7
J. Community Involvement	--	2.3	--	2.8	1.6
K. Parent Involvement	--	.4	.1	.3	--
L. Professional Self-Development	2.4	8.7	3.9	1.0	3.2
M. Staff Meeting	24.1	8.9	16.8	12.1	.8
N. Staff Rapport	--	1.2	1.2	1.3	2.7
O. Other	4.6	6.7	6.4	6.9	6.1
Total hours logged	103.79	836.60	368.92	389.93	253.93

VI. Conclusions, Implications and Recommendations:

As can be seen by Part IV of this report, the project had a number of very positive results on the public and non-public schools of Bristol. Project activities, however, were not free from some encumbrances. Due to the original goal of influencing the entire curriculum within three years, for all schools, the scope of the program was rather large. To put this final assessment in perspective, therefore, this section of the report provides conclusions, implications and recommendations according to the original set of objectives, the project developed objectives, administrative concerns and, lastly, the general impact the project has had on the district.

A. Elementary Objectives (K-8)

1. Conclusions: It can be concluded that substantial effort was made by the participating elementary Bristol educators to develop and adopt methods which fostered a change in the educational process. This change was, in fact, demonstrated by greater numbers of students exhibiting an increased awareness of self, potential careers and community resources during and after the project as compared to before the program's beginning. This information was procured from informal assessments made by concerned teachers, parents and administrators. Empirical evidence, however, has not verified this assessment in that the project did not have a continuous, research approach to project evaluation (see Part V). What was clearly evident, however, was the fact that schools not participating in the project did not yield a similar set of observations from their respective teachers, parents and administrators. As far as teachers becoming more aware of knowing and using concepts related to career education, the same basic pattern appears evident. In schools where teachers were deeply involved, curriculum changes were made.
2. Implications: The project at the elementary level may have had two erroneous assumptions built into the original design:
   a) That the entire elementary curriculum of a school district serving 14,000 students could be totally modified within a three year period of time. It might have been more appropriate to have concentrated all project efforts in the original set of four K-8 target schools for the three year period. This would then have allowed the district to have developed a more refined set of models. This, in turn, would have allowed the other non-target schools to adapt career education at a pace determined by school officials after the project concluded.

b) That voluntary participation in the project by teachers and administrators could produce a total approach to career and self-awareness activities. While voluntary participation did produce extensive amounts of career education material, there was a notable lack of systematic incorporation of these materials into all classes. Further, the participating teachers developed such activities on the basis of curriculum requirements and not on the tenets of Career Development. This meant that a systematic approach to exposing children to the fifteen Career Clusters was not possible. In short, most project pupils were exposed to, on the average, five or six clusters.

3. Recommendations: In reviewing the elementary objectives, it appears evident that a primary and intermediate career education project should attempt to concentrate its efforts within a small, representative group of schools which become totally committed to developing the model(s) for the rest of the district.

B. Secondary Objectives:

1. Conclusions: The Bristol Career Education Project experienced a large degree of success in achieving the objectives of the high school phase. The most notable achievements were in developing outstanding career exploration, guidance outreach and community involvement programs. Just about all high school students became involved in career education activities as a result of these efforts. Moreover, this involvement was accomplished in a systematic way and was well coordinated with the regular curriculum. Importantly, the extensive community involvement built by this project led the way to major amounts of similar involvement in all phases of the educational process in the district. Further, this involvement was instrumental in the successful effort to develop a system-wide Department of Vocational and Career Education.

Regarding other aspects of the secondary objectives, a smaller degree of success was achieved. While it was possible to encourage students to seek vocational and work experience skill training, it was not possible to place all interested students into such learning experiences. This placement problem was simply due to numbers. Over one thousand five hundred students showed this interest. The district serves about five hundred in approved vocational programs and we have been able to send another one hundred or so to State operated vocational schools. This leaves about nine hundred students not served in vocational programs. The project, however, did help the district and the State Department of Education to focus on this problem and as a direct result, the State has agreed to

establish a regional Satellite Vocational-Technical School in Bristol which should be serving another two hundred students. The graduate follow-up study results for two years also helped to emphasize this need for more vocational and basic academic instruction. This study, while effective in gathering pertinent occupational education information, did not have extensive impact on counseling functions. This was due to time limitations in getting this information built into the district's guidance objectives. What the study did allow for, however, was success in preparing high school juniors and seniors to apply for positions. A very successful aspect of guidance outreach programming was the job interview procedure instruction built into English classes. Further, the drop-out follow-up study became the basis for two additional projects:

a) A Title VI Special Education program
b) A Title IV Individualized Alternative Study program

2. Implications: The high degree of success of the secondary phase of the project can be traced directly to the concentration of services. Unlike the elementary portion, where two staff members were responsible for over five hundred teachers, the secondary level was designed to have one specialist for each high school; or one staff member per one hundred fifty teachers. Further, these career specialists being assigned, for the most part, to one school became identified as a staff member of that school. This, no doubt, helped foster greater communications and interdependence between the regular staff and project personnel.
3. Recommendations: It appears quite appropriate to recommend that a secondary career education project should have a high degree of concentrated effort per school. Extensive and positive results can be achieved if the career education personnel are assigned as part of the school staff; and, where such personnel are receptive to the needs of the school's faculty. A further requirement would be that career education staff be thoroughly dedicated to guidance, humanistic education and career education principles.

C. Placement Program Objectives:

1. Conclusions: While an extremely efficient method for assisting exiting students to secure a job situation, two factors detracted from this program's effectiveness. The first dealt with community knowledge of this service. For many years, potential employers relied on informal contacts with a wide variety of school system staff. In short, many different educators were assisting their friends in the community to find appropriate people for jobs prior to the project's implementation. While efforts were made to orient the community to the more centralized placement program, much

more time and money was definitely required to achieve these objectives in an effective manner. The second major difficulty affecting this program was the drastic downturn of the economy of the Central Connecticut region. Prior to 1972, just about 50% of graduating students could be expected to find positions after leaving the school system. Between 1973 and 1976 this number was cut in half due to the severe impact the recession had on the region. Fewer jobs available simply meant fewer placements.

2. Implications: This phase of the project, therefore, was initiated with two powerful factors working against successful implementation. It is estimated that at least five years and $50,000.00 worth of effort could have re-oriented both community employers and school staff to rely more on a centralized placement program. Further, an experimental placement function can only be fairly tested during relatively stable economic conditions.
3. Recommendations: From the above information, it is clearly evident that an experimental effort to institute a centralized placement program must have stable economic conditions as well as sufficient time and resources to orient the various populations to this service.

D. Resource Center Objectives:

1. Conclusions: Next to the secondary phase of the Bristol Career Education Project, this phase was the most successful. There was more than adequate provision in funds to equip this center to produce quality results for the entire school district. Teachers, through the vast array of in-service training, became comfortable in using materials and equipment from the center to develop the aforementioned variety of career education activities. This was further developed by the resource center coordinator's efforts to establish Satellite Resource Centers in a number of Bristol schools. Also, through having resource development aides and good communication resources, this center became the catalytic agent to have the community become deeply involved in career education. In, short, this phase of the project provided extensive support functions in order to allow the career specialists to work with teachers in developing grass-roots career education activities.
2. Implications: It would appear, as a result of this phase of of the project, that a thorough effort to develop a career resource center would be very beneficial to any career education program. To be successful, however, such a support program must be able to provide adequate resources, in a fairly immediate response to teacher, student and/or administrator needs. Further, such a center probably would need a method to acquaint these populations with what is

available. Such devices may include in-service training, news letters, information bulletins, etc.

3. Recommendations: As a result of having such success with the Career Resource Center, it would appear that most programs in career education could benefit from a similar effort. However, Bristol's experience seems to indicate that this type of center must be appropriately staffed and equipped. Further, an active, positive effort must be made to develop utilization of the center by other, peripherally involved educators.

E. Administrative Concerns:

1. Conclusions: Administratively, this total project was a very large undertaking. Extensive cooperative efforts had to be instituted between project personnel, building personnel and all other supportive staff. Such three way communications periodically would break down creating some degree of misunderstanding. This, in turn, would lessen the effort within a particular school and/or department to implement career education. However, in schools where the principal and/or department head took an active leadership role, project activity was extensive. For example, the seventh and eighth grade curriculum in English, Mathematics, Science and Social Studies became heavily infused with career education concepts at West Woods School. The principal became a facilitator and coordinator so that most teachers and all students became involved in developing a Model City. The core of activity was to have each student function within the school in a job situation. The city had an employment bureau, radio station, store and bank. Script currency was used to pay children for certain "occupations" for which they competed. In short, a mini-society was created and became very successful. Leading this venture was the school principal and the science department head.

Another administrative concern became staff continuity. Several of the project personnel left for other, more responsible positions. This led to a degree of breakdown in service by the project. Obviously, efforts were made to replace such staff as quickly as possible; and for the most part, such attempts were successful. However, two situations, occurring at different times and for different reasons, left the project short staffed for a considerable period of time.

Finally, two other concerns affected the program from an administrative standpoint. As mentioned before, three years appears to be to short a time span to effectively change the total curriculum of a district the size of Bristol. Even projects funded at the level of the Bristol program must still deal with traditions inherent in the community and the

school system. Such traditions often work against change, no matter how important such change may be viewed by some populations of the school district. Further, the even funding level of projects having multi-year life can serve as a detriment to the eventual pick-up of project functions after this start-up period is over. This Bristol project cost about $130,000.00 a year to conduct. That figure represents more than one mil in taxes. The temptation to "chop" such a support program from the regular school budget at the end of Federal funding becomes very great. It might be a more appropriate method to fund similar projects in a "sliding" fashion. In this manner, the start-up costs at the beginning would be totally Federal funds. After the first year, Federal funds would drop annually with a commensurate rise of local funding. Doing this over a five year period would thus allow a more comfortable period for project implementation and would also permit the local district to assume, annually, an increasingly more responsible financial role.

2. Implications: As indicated above, project administrative activity could have been improved upon. It appears that increased program life with an extended funding pattern would have been extremely helpful to implement such a massive effort. Further, project activity appears to be most effective where there is extensive middle management commitment to the goals of the program. This can be further enhanced by having communications as direct as possible. It would also appear that extensive in-service training of principals and department heads, prior to the initiation of project activity, could help to reduce potential difficulty. Incidentally, it has been our experience with title IV operations that when these two populations are responsible for funded programs, the project does run more smoothly and have a more immediate impact on students.
3. Recommendations: As a result of Bristol's Career Education Program, it appears that future projects would fare better if:
   a) Project funding life be extended from three to five years
   b) Project funding be based on a sliding formula rather than a full funding pattern. Such a formula could be scheduled as follows:

First Year =	100% USOE funds	
Second Year =	80% USOE funds	20% Local funds
Third Year =	60% USOE funds	40% Local funds
Fourth Year =	40% USOE funds	60% Local funds
Fifth Year =	20% USOE funds	80% Local funds
Sixth Year =	0% USOE funds	100% Local funds

   c) In-service training, regarding program involvement for principals and department heads, would be the initial function of projects.

d) Thorough, direct communications be made a major responsibility of project directors.

F. General Impact of Bristol's Career Education Project:

1. Conclusions: In final review, it appears that the three year Career Education Program in Bristol has brought some major changes in the curriculum. Further, it has inserted practical, world of work concepts into many of the district's classrooms. To be sure, some teachers found it more useful than others; and, as a result, some students received a greater benefit than others during the rather short project period. But that appears to be the nature of most change efforts; and, therefore, is not a reflection on the concepts of career education per se. What is noteworthy, is the fact that the project did have a major impact on this school system. One prime example of this influence was the creation of a city-wide Department for Vocational and Career Education. The district has budgeted more than $50,000.00 to allow for this department's functions during 1976-1977. Coincidently, Bristol's efforts served as a working model for other Connecticut districts and as one of several devices to assist the State Department of Education to implement both a Master Plan for Vocational and Career Education and P.L. 75-422. This law stipulates that all school districts in the State must have goals, objectives and a plan to develop and offer students services in career and vocational education by November, 1977. In short, while problems did occur in the operation of this project, many positive results also occurred. Further, in weighing these, it definitely appears that the positive achievements were much more numerous and beneficial to the district's students than the difficulties.
2. Implications: It would appear, then, that any effort which helps to bring students in touch with the real world they will encounter as adults, would be beneficial to districts similar to that of Bristol. When such efforts go further to provide these students with practical information regarding occupations and the various expectations therein, it can only result in better prepared students; which is, no doubt, a major goal of most American school systems.
3. Final Recommendations: In that Bristol did achieve a fairly large number of positive benefits in undertaking a revision of the curriculum toward a career education orientation, this project can be considered relatively successful. Therefore, it is recommended that other school districts, which are seriously considering curriculum revision, thoroughly review career education concepts and techniques. Such changes may allow these districts to assist students in becoming better prepared citizens.

ATTACHMENTS

The Bristol Public School System affirms its compliance with Title VI and Title IX legislation, meaning that it does not discriminate nor permit discrimination on the basis of race, color, religion, handicaps, sex, age, or national origin.

ATTACHMENTS TABLE

Sex-Role Stereotyping In-Service Training	Attachment A
Introductory Letter Regarding Curriculum Guide Dissemination	Attachment B
Career Education Curriculum Guide, K-6	Attachment C1
Career Education Curriculum Guide, 7-8	Attachment C2
Career Education Curriculum Guide, 9-12	Attachment C3
Career Education Placement Service Guide	Attachment D
Invitation Letter Regarding State Master Plan	Attachment E
Needs Assessment Survey Form	Attachment F
Job Description for Administrator for Vocational and Career Education	Attachment G
Community Resource Guide	Attachment H
Career Education Program Guide	Attachment I
Career Education Resource Center Bibliography	Attachment J
The Exchange, The Bristol Career Education News Letter	Attachment K
Assorted Brochures	Attachment L1 L2 L3 L4
Satellite Vocational-Technical School Program	Attachment M

CURRICULUM GUIDE

AND

BIBLIOGRAPHY

"Reducing Sex-Role Stereotyping
Through Career Education"

Bristol Career Education Program

Curriculum Guide:
"Reducing Sex-role Stereotyping Through
Career Education"

Project No. 554AH50069

Grant No. G007502291

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The curriculum guide reported herein was developed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Points of view or opinions stated do not represent official Office of Education position or policy.

Clarice N. Stevens
Project Coordinator
Bristol Career Education Program
Bristol, Connecticut 06010

CONTENTS

		Page No.
I.	LESSON PLANS:	
	A. Biology	1-2
	B. Clothing I.	3-4
	C. Community Studies	5-6
	D. Distributive Education	7-8
	E. English	9-11
	F. Foods II.	12-13
	G. Guidance.	14
	H. Mathematics	15
	I. Physical Education.	16
	J. Spanish	17
	K. Special Education	18-19
	L. Springmaking.	20
	M. Typing II	21-22
	N. Women in Literature	23-24
	O. World History	25-26
II.	BIBLIOGRAPHIES:	
	A. Business.	28
	B. Career Education.	29
	C. Distributive Education.	30
	D. English	31
	E. Foreign Language.	32
	F. Guidance.	33-34
	G. Home Economics.	35
	H. Industrial Arts	36
	I. Mathematics	37
	J. Physical Education.	38
	K. Science	39
	L. Special Education	40
	M. Women in Literature	41
	N. World History	42

PREFACE

The selection of a career is significantly affected by a person's self-concept. An important aspect of one's self-concept is sexuality. Early in life, people learn behaviors which are appropriate for their respective sexes. Since we are living in a sex-biased society, people's values, behaviors, and consequent career choices are dichotomized a long sexually determined lines. An unconscious ideology about the nature of the male and female exists and constricts the emerging self-image of the child. Sex-role conditioning places an artificial constraint on the aspirations of all people in our society and precipitates a pervasive pattern of discrimination.

Sexism continues to be an integral part of the hidden curriculum in many school settings. Students interacting with sex-biased teachers will inculcate a sex-stereotyped self-concept and value system which will perpetuate career selection along sex-biased lines. In order to avoid continued imposition of sexism in the schools, it is necessary to heighten the awareness and understanding of its influence in school personnel.

The lesson plans and bibliographies compiled in this booklet were created by the people who participated in a series of in-service workshops to heighten awareness of sex-role stereotyping and its relationship to Career Education. After developing awareness of sex-stereotyping, participants designed and implemented career units in their classrooms. These projects represent one way that awareness developed during in-service workshops were transferred to their students.

I wish to express special appreciation to Irv Hott for his efforts in conducting the workshops and Kathy Quinn for her support in compiling this booklet.

Clarice N. Stevens
Project Coordinator
Bristol Career Education Program
Bristol, Connecticut 06010

CLUSTER: Consumer and Home Economics

SUBJECT: Biology

DEVELOPED BY: Robert Quilty

GRADE: 10-11

RELATED TO: Child Development

GOAL: To show the parents' relationship with the child effects personality development

CAREER EDUCATION OBJECTIVES:

To discuss the ways in which a mother might respond to the child's needs
To show the effect that harmony in the home has on child development
To present the effects of the broken home
To show how sex biases are reinforced in father's relationship with a son and a daughter
To discuss the role of the mother with the children
To discuss changes in the mother-child relationship when the mother assumes a career while the child is very young

PROCEDURE

I. The New Baby
   A. Learns to cry for attention
      1. Cries when hungry, uncomfortably, etc.
         a. Should mother attend to baby every time he cries?
         b. Should mother only feed, hold, etc., on schedule?

II. Father-Mother relationship
   A. Harmony in the home
      1. Child feels secure if he absorbs love, security, job, laughter from parents
         a. From this the child develops happiness, kindness, and self confidence
   B. The broken home
      1. Child's tendency to love both parents thwarted by fact that each parent resents the other
      2. Child's desire to be with both parents equally is thwarted by divorce court
         a. Does one parent now have more effect on child than the other?

III. Father-Child relationship
   A. Father-Son
      1. Father instills masculine attributes in son
         a. Father becomes symbol of self-sufficiency, aggressiveness, and strength
   B. Father-Daughter
      1. Effect of father-daughter relationship is less clear than father-son
         a. Father can't teach "Feminine Graces", but can show pride and approval as they develop

IV. Mother-Child relationship

A. Both son and daughter look to their mother first for all their needs

1. Mother is first to give feelings of being loved and secure
2. Mother usually spends more time than father with child

B. Effect of the "modern woman's career away from child

1. Grandmother, aunt, sister, baby sitter, day care center, CANNOT adequately replace a mother in the emotional life of a child
   a. Detrimental to personality development?

RESULTS:

1. Students will be able to identify three ways that mother might respond to the need requests of a child.
2. Students will be able to name five feeling tones that parents communicate to a child that help the child to feel secure.
3. Students will state two ways that a child might be effected by a broken home.
4. Students will be able to list male and female roles that father transmits to a son and to a daughter.
5. Students will write a paragraph describing the role the mother plays in child parenting.
6. Students will be able to compare the role of mother and housewife with the role of mother and career woman.

FOLLOW-UP: Students will interview a male and female in order to learn from them how they see their role with their children.

CLUSTER: Consumer and Home Economics

SUBJECT: Clothing I

DEVELOPED BY: Kathy Quinn

GRADE: 9

RELATED TO: Fashions

GOAL: To explore the role played by the fashion industry in meeting societal demands for clothing

CAREER EDUCATION OBJECTIVES:

To explore the feelings people have wearing different kinds of clothing
To learn how choice of clothing indicates who a person is
To examine clothing cues
To discuss the image of woman as projected in the fashion industry
To present career opportunities in the fashion industry
To examine gender stereotyping in fashion related work

PROCEDURE:

SESSION I

A. Have the students select a pattern or bring a picture of an article of clothing that they would either like to make or purchase

Use the article of clothing that they have selected to make or buy as the basis for writing an I statement.

I selected _____ because I like _____
(outfit)

_____
(describe the personal appeal)

I think I would feel _____

when wearing this _____
(outfit)

B. Discuss clothing cues
Have the students bring in one picture of an individual in clothes.
Look at each picture to determine the cues given about the following:
- Life style
- Values
- Attitudes
- Priorities
- How they spend their time
- What type of work they do

C. What clothes cues do students present? What values, attitudes, etc., do they project?

D. What image of woman does the fashion industry project?

SESSION II

A. Show the filmstrip: Jobs: Lots of Them
The Fashion Industry
Butterick

Have the students observe the variety of jobs in the fashion industry
Show the filmstrip again:
Have the students check off on a list three jobs the filmstrip show women doing and the jobs the filmstrip shows men doing
Circle any jobs that you would like to know more about
Put a check beside those jobs that you feel can be done well by both males and females
What types of jobs does the fashion industry suggest are men's jobs and women's jobs

RESULTS:
1. The students will be able to describe the difference in how they feel when they are dressed casually or formally
2. Students can list five job possibilities in the fashion industry
3. Students will write a paragraph describing the image of woman as portrayed in fashion magazines
4. Students will identify three things you keep in mind when purchasing clothing
5. Students will be able to list three personality characteristics that are shown by the kind of clothes they wear to school

FOLLOW-UP ACTIVITY: The students evaluated the two-day experience.

CLUSTER: Business and Office and Manufacturing

SUBJECT: Community Studies

DEVELOPED BY: Velma McAuliffe

GRADE: 9

RELATED TO: Career Opportunities in Mathematics

GOAL: To explore math related careers

CAREER EDUCATION OBJECTIVES:

To identify those jobs in the business and office and manufacturing clusters whose entry requirements is a high school diploma
To learn how to complete income tax forms
To discuss the items listed on the paycheck stub
To understand the use of timecards
To examine salaries to see if there are differences for male and female hired to do the same job
To use community resource persons from Social Security, Employment Office, and IRS to talk about job opportunities and their responsibilities.

PROCEDURE:

I. Careers available in Mathematics
   A. Computer Operator, Bookkeeper, Bank Teller, etc.

II. Earnings - Payroll
   A. Salary, hourly rate, piecework (a good opportunity to show sex discrimination in wages. A man and woman doing the same job but given different titles and the man being payed higher wages.)
   B. Timecards
   C. Deductions
      1. F.I.C.A.
      2. Withholding taxes
      3. Hospitalization
      4. other deductions

III. Income Tax
   A. W-2 forms
   B. 1040-A form (a good opportunity to show discrimination against single people.)

The above unit will be supplemented with guest speakers, field trips, and film strips.

Guest speakers will include people from the Social Security office, Employment office, I.R.S. office.

Field trips in connection with this unit will include a trip to Pratt-Whitney in Southington. Here students are able to observe employment in many fields with pay determined by salary, piecework, and timecard. This factory is excellent for field trips because they stress education.

Students will also be involved in a "shadow program" in which they will spend from 3 hours to all day observing people in a profession they think they are interested in as a future occupation.

RESULTS:
1. The students will be able to name two jobs in the business and office cluster and two jobs in the manufacturing cluster that require math in order to qualify for the job.
2. The students will complete the short form of the income tax.
3. The students will learn how to analyze payroll deductions.
4. The students will be able to punch a time card.
5. The students will select one job and list the salary offered to a male and a female who hold the same position.

FOLLOW-UP:
1. Students will visit Pratt and Whitney to learn about job opportunities in industry.
2. Students will shadow a person who holds a job that the student would like to have as a future occupation.

B. Resume
   1. Review of the elements of a resume
   2. Students write personal resume

C. Application Blank
   1. Students read copies of applications from local businesses
   2. Discussion of questions on applications
   3. Students discuss questions regarding sex-role stereotyping identified on applications.
   4. Students complete an application blank.

IV. Interview

A. Video taping of interviews role-played
   1. A male and female student are interviewed for the same position, once by a male interviewer and once by a female interviewer.
   2. Students view video tapes and comment on questions asked of male and female applicants.
   3. Students identified appropriate interviewing techniques.

B. Do Clothes Make the Person?
   A. Magazine pictures
      1. Students evaluate pictures regarding appearance
      2. Students discuss appropriateness of attire for various jobs.

C. Applicant
   A. Students assume role of personnel director and decide who to hire on the basis of descriptions of applicants.
   B. Students defend decision regarding who they hired.

RESULTS:

1. The students heighten awareness of self as they relate to the world of work.
2. The students can identify sources of employment.
3. The students are able to write a letter of application, resumé and complete an application blank.
4. The students develop interviewing skills.

FOLLOW-UP:

1. Students write thank-you letters to the employers by whom they were interviewed.

CLUSTER:

SUBJECT: Distributive Education

DEVELOPED BY: Daniel Viens

GRADES: 11-12

RELATED TO: Securing Employment

GOAL: To develop job seeking and securing skills.

CAREER EDUCATION OBJECTIVES:

To gain knowledge of sources to use to look for employment
To understand the job seeking process
To heighten students' awareness of interviewing procedures
To heighten students' awareness of their values related to careers, career goals and interests
To develop an understanding of equal opportunity for men and women in obtaining and performing on the job

PROCEDURE:

I. Personal Inventory
   A. The Ideal Job
      1. Students write about the job they think is the best job in the world.
   B. Interests
      1. Students become aware of interests by completing sentences
      2. Students differentiate between passing whims, thoughtless behaviors, valued goals.
   C. Twenty Loves
      1. Students list 20 things they love to do
      2. Lists were shared, students drew conclusions regarding what they like to do, actually are doing and what they would like to do.
   D. Personal Inventory
      1. Students compiled information about themselves which relates to careers
   E. Job Survival Kit
      1. Students assess the relative value of their attitudes toward values and material things necessary for job success.
   F. Are Women Equal?
      1. Students explore feelings regarding women who work
      2. Students complete and discuss an attitudinal survey

II. Sources of Employment
   A. Want Ads
      1. Students cut out want ads from the local paper that are sexist.
      2, Class discuss and comparison of ads.
      3. Students cut out want ads they are capable of pursuing presently.

III. Letter of Application, Resume, Application Blank
   A. Letter of Application
      1. Students developed awareness of elements of letter of application
      2. Students write a letter to a business in which they seek employment

CLUSTER: All fifteen

SUBJECT: English

DEVELOPED BY: Dolly Ritchie

GRADE: 11-12

RELATED TO: Sexism

GOAL: To develop an awareness of sexist practices

CAREER EDUCATION OBJECTIVES:

To examine sexism in language
To look for sex role stereotyping in primary grade readers
To write a non-sexist story
To observe sex role identifications made by children in a nursery school or a kindergarten
To discuss the influence of the media on sex role stereotyping

PROCEDURE: Activity I
Find the parallel word

FEMALE	MALE
NYMPHOMANIAC	
WHORE	
SPINSTER	
OLD MAID	
CHICK	
BROAD	
BABE	
BITCH	
CASTRATING BITCH	
THE LITTLE WOMAN	
LITTLE OLD LADIES	
GIRL	

QUESTIONS

Does the parallel word mean the same as the word used for females:

Is the parallel word negative or a put down?

Does it connote status?

Can a parallel word always be found?

General discussion on how the female students feel when referred to by these terms will most likely ensue. Also, the ideas of how students feel about themselves will be discussed.

ACTIVITY II

Obtain enough primary grade readers for the entire class. Have the students read these and have them look for examples of sexual stereotyping. Some questions that may be used are:

Do females appear as frequently as men?
Do females work outside of home?
List the activities of women and men.
List the activities of girls and boys.

Some specific areas to look for will be:

imagination	romance
creativity	activity
dependency	athletics
independent	intelligence (math & science)
fears	achievement
worry	employment
emotional	traditional roles
vain	patronizing
clothes	size of children

These findings are valuable if they are put on the board under female/male columns. A general discussion usually revolves around women's self image and how it is influenced by the items we read. After the students have identified a sexist text, have them write their own non-sexist story on a primary level, include pictures and text.

ACTIVITY III

After the activity of identifying sexism in the text and writing a non-sexist story, a trip to a nursery school or kindergarten is valuable.

Small groups are best. Young children can be disturbed by large groups.

The students should be prepared for the trip. Have a class discussion on what they will look for in the children. The ideas that came up are usually focused on the following:

aggression	relation with friends	choice of career (if possible)
choice of toys	relation with teacher	attitude of teacher
appearance	choice of games	types of books available
		types of toys available

After the visitation, have students report on their findings--both written and orally.

ACTIVITY IV

Have students examine the media, such as TV, advertisements, magazine and newspaper articles for stereotypes of both women and men. Have students bring in examples of sexism in ads, etc. and show them to rest of class. Have each student speak on these examples in class and a general discussion will occur concerning how the media influence our actions.

To get students started on this assignment, the instructor may want to show students the "No Comment" pages of Ms. magazine for a model.

RESULTS:
1. The students will analyze how they feel about being a woman..
2. Students will be able to identify three roles assumed by men and three roles assumed by women in our society.
3. The students will write a non-sexist story.
4. Students will bring in one ad that is an example of sexism.

FOLLOW-UP: Students will write a paragraph commenting on the ways that sex role stereotypes are reinforced by the educational systems.

CLUSTER: Consumer and Homemaking

SUBJECT: Foods II

GRADE: 10-11-12

DEVELOPED BY: Debbie Wiecek

RELATED TO: Food Service Careers

GOAL: To develop an awareness of career opportunities in the Food Service Industry

CAREER EDUCATION OBJECTIVES:

To recognize the growth trends of the food service industry
To identify job training opportunities related to food service
To analyze personal interests related to food service careers
To present training programs in food services that are available to high school students

PROCEDURE:

1. Discuss the qualities or skills that the students feel would be helpful in a food service career. The predominance of males and females in specific jobs will be discussed too.
2. Career speaker presentations.* (Note: An effort would be made to engage both a male and a female working in the same job to talk to the students.)
   a. dietician
   b. restaurant owner
   c. caterer
   d. fast food service company manager

   *Speakers to include the following in their presentation: description of job, required training or experience, responsibilities of the job, benefits, and pros and cons of the job.
3. Expose students to available jobs in food service by means of a field trip.
   a. commercial bakery
   b. fast food restaurant
   c. restaurant
   d. industrial, school, or hospital cafeteria
4. Allow each student to select one job in food service that may interest him/her. Student will look up job description and qualifications of selected job in the Dictionary of Occupational Titles.

RESULTS:

1. The students will identify FIVE qualities or skills that might be needed to be successful in the Foods Services field.
2. Students will select one job that was held by a career presenter and compare the job responsibilities that were assigned to the male and female who held the same position.

FOLLOW-UP ACTIVITIES:

1. Students will evaluate their reactions to speakers.
2. Students will evaluate their field trip experience.
3. Students will clip "Help Wanted" ads from local newspapers for the positions they are researching to find: starting salary, required experience or education, availability of jobs.
4. Obtain sample application blanks from a local food service company.
   a. Students to compile a date notebook containing information needed on employment forms (social security number, educational record, references, birth date, telephone number, etc.).

CLUSTER: All Fifteen

SUBJECT: Guidance

DEVELOPED BY: Clarice Stevens

GRADE: 9

RELATED TO: Career Counseling for Freshmen

GOAL: To heighten student awareness of the career decision-making process and awareness of self in relation to prospective career alternatives.

CAREER EDUCATION OBJECTIVES:

To provide an opportunity for freshmen to heighten awareness of work-related interests, aptitudes, and values.
To provide an opportunity for freshmen to experience the decision-making process.
To provide an opportunity for freshmen to explore careers compatible with their interests, aptitudes, values, and feelings.
To provide an opportunity for freshmen to experience self-awareness activities, and share in a group setting.
To facilitate freshmen in making a tentative career decision.
To expose freshmen to the Career Education Program and materials available in the Career Resource Center.

PROCEDURE

1. Facilitate eight weekly group sessions during which career self-awareness activities are experienced and shared with group members.
2. Expose freshmen to the Career Resource Center by meeting in the Center.
3. Expose students to career clusters and relate career self-awareness to specific jobs within the clusters.
4. Initiate a tentative career decision.
5. Discuss career alternatives compatible with interests, attitudes, and values.
6. List three tentative career alternatives.
7. Expose students to possible future sources of information and activities.

RESULTS

1. Freshmen will heighten self-awareness regarding career interests, abilities, and values.
2. Students will know where career information is available for future reference.
3. Freshmen will be able to identify the cluster to which their career interests belong.
4. Freshmen will have experienced the decision-making process.
5. Freshmen will be more aware of their peers, career values, aptitudes, and interests.
6. Students will compile a folder containing career information.

FOLLOW-UP ACTIVITIES

1. Students may participate in the career speaker and career exploration programs.
2. Students may continue independent career research using resources in the Career Resource Center.

CLUSTER:

SUBJECT: Mathematics (Algebra II, Geometry, Elementary Algebra)

DEVELOPED BY: Elizabeth Phelan

GRADE: 10-11

RELATED TO: Sex Bias in Textbooks

GOAL: To examine textbooks used in the classroom for instances of sex bias

CAREER EDUCATION OBJECTIVES

To look for instances of sex-bias in textbooks illustrations
To examine biographies of mathematicians and scientists for examples role stereotyping
To review word problems for examples of work identified male and female
To complete a questionnaire where students identify roles they see being assumed for males and females

PROCEDURE:
1. Examine Math Textbooks for sex-bias in illustrations, word problems and biographies.
2. Complete checklist identifying activities that are male or female.

RESULTS:
1. The students will find five illustrations in their textbook and describe the activity being performed and tell who is performing the activity.
2. Students will study ten word problems and will list the roles typically assumed by males and females.
3. Students will be able to name two mathematicians and two scientists who have been identified in their textbooks. They will be able to explain why more males than females are depicted as mathematicians and scientists.
4. The student will discuss the summarized results of the checklist.

FOLLOW-UP:
The students will write a paragraph identifying their role as males or females.
The students will discuss gender role stereotypical behavior of students in math classes.

CLUSTER: All Fifteen

SUBJECT: Co-Educational Physical Education

DEVELOPED BY: Joann Galati

GRADES: 11-12

GOAL: To provide opportunities for exploring the full range of physical education activities and programs which can contribute to students' optimal physical and personal development.

OBJECTIVES:
1. To provide opportunities for girls and boys to develop positive attitudes towards their physical selves and their physical capabilities.
2. To provide opportunities for girls and boys to develop an appreciation of the value of physical activities as a means of maintaining life time physical fitness.
3. To assist girls and boys in the development of an appreciation of concepts of usage of leisure time, sociability, and acceptance of boys and girls playing together.
4. To expose students to possible careers in physical education without differentiation by gender.

PROCEDURE:
1. Develop courses which will initiate and/or modify activities so that boys and girls may participate on an equal basis.
2. Implement a wide variety of activities which students may select and participate in according to their needs, interests, and capabilities.
3. Discuss possible careers in the field of physical education.

ACTIVITIES:
1. Implementation of the following activities for boys and girls to participate in co-educationally:
   A. Yoga
   B. Self-defense
   C. Folk dancing
   D. Contemporary dancing
   E. Soccer
   F. Flag Football
   G. Weight Training
2. Discussion of possible careers in the field of physical education and their availability to males and females.

RESULTS:
1. Males and females will select and participate in activities based on their needs, interests, and capabilities irregardless of their sex.
2. Males and females will be exposed to all activities.
3. Males and females will develop a greater degree of appreciation for the similarities and differences in their through observation and participation in co-educational physical activities.
4. Students will heighten awareness of careers in physical education which are non-sex-biased.

CLUSTER:

SUBJECT: Spanish

DEVELOPED BY: Donna Russo

GRADE: 9-12

RELATED TO: Usefulness of Foreign Language in Career Choice

GOAL: To explore career opportunities where Spanish can be used as an adjunct skill

CAREER EDUCATION OBJECTIVES:

To discuss the usefulness of a foreign language
To identify job opportunities in the Bristol Community where Spanish can be used
To discuss the implications of sex-role stereotyping
To explore the interests and abilities needed by persons who use Spanish on the job

PROCEDURE:

I. Class discussion of usefulness of foreign languages in career choice
   A. Limitations
      1. Societal
      2. Individual
   B. Opportunity for Choice
   C. Awareness of availability
   D. Abilities
      1. Gender?
      2. Sex-role stereotyping

II. Survey distributed to gain information regarding interest, availability of second language speaking workers, and career choice.

III. Based on class interests, various speakers from the surrounding community who use foreign languages on the job or whose ability to speak a second language was an asset in gaining employment will speak to groups of students based on interests. Questions will be prepared by students regarding use of a second language on the job and working conditions.

RESULTS:
1. The students will be able to identify three uses they might have for Spanish
2. The students will be able to name two places in Bristol where the employees use Spanish
3. The students will identify the effects of sex-role stereotyping on jobs
4. Students will evaluate their interests in the jobs of the career presenters

FOLLOW-UP:
1. Students will evaluate the project

CLUSTER: All Fifteen

SUBJECT: Special Education

DEVELOPED BY: Caryl McIntire

GRADE: 9-10

RELATED TO: Work Roles Assigned To Males and Females

GOAL: To explore work roles

CAREER EDUCATION OBJECTIVES:

To identify mother's role and father's role
To discuss role reversal by parents
To examine job interests
To learn job requirements
To talk about job responsibilities

PROCEDURE:

Session I: Discussion of the home

A. Roles
   1. Mother's roles jobs
   2. Father's roles jobs
B. A discussion of what would happen if ....
   1. Write a story together or take one from a book--play it straight then reverse the roles
   2. Discuss
      a. Why mother has to stay home.
      b. Why father has to go to work.
      c. How individual parents would work out if roles were reversed

Session II: YOU

A. Types of jobs I would like to get
B. Discussion
   1. Who usually gets this type of job
   2. Could a male do it
   3. Could a female do it
   4. What does the job entail-detailed listing of work requirements
   5. Do I fit these requirements as a PERSON
C. Choose 5 jobs-list in detail work which has to be done on these jobs. Make a scrapbook. Wrtie how you would feel about doing each of these jobs.

Session III: Several speakers invited in to discuss in detail requirements for a particular job--can men do it, can women do it

Session IV: Trips to several places of employment

A. Factory
B. Hospital
C. Cafeteria
D. List in detail what workers have to do
E. Discuss whether only one or both sexes could do it

RESULTS:
1. Students will describe the role of mother and the role of father in the family unit.
2. The students will identify five jobs that interest them.
3. The students will list the entry requirements for the five jobs.
4. The students will list the job responsibilities for each job they identified.
5. Students will look at the five jobs to see if they can be done equally well by male and female.

FOLLOW-UP:
1. The students will make a scrapbook that describes how they feel about the jobs explored.
2. The students will take field trips to expand their awareness of job possibilities.

CLUSTER: Manufacturing

SUBJECT: Springmaking

DEVELOPED BY: Lou Palazzo

GRADE: 10,11,12

RELATED TO: Jobs in Industry

GOAL: To explore job possibilities in the springmaking industry

CAREER EDUCATION OBJECTIVES:

To identify job interests in industry
To learn what is required to enter specific jobs
To discuss the skills needed for different jobs
To look at what positions are held by males and females in industry

PROCEDURE:

1. In the classroom the students will list the various occupations at which people whould be employed in a spring manufacturing plant.
2. The students will then rate the occupations as to difficulty as they perceive them.
3. Using spring industry pay scales, rate the occupations according to pay.
4. Students will pick three types of work in a factory he would be willing to do.
5. Each student will list qualifications, skills and duties required of each occupations he has chosen, using WORK STUDY AND CAREER RESOURCE information.
6. A field trip to a spring manufacturing plant will be made by the class.
7. Students can get additional information on the responsibilities of these occupations by watching and talking to the people performing the jobs.
8. Students now have to list specific reasons why the jobs they chose could not be performed by an adequately trained person of either sex.

RESULTS:

1. Students will list five jobs in the springmaking industry
2. The students will rank the difficulty of the five jobs as they perceive them
3. The students will list the starting salary for each of the five jobs.
4. For each of the five jobs the students will list the qualifications and the jobs responsibilities
5. The students will identify whether on the tour they observed a male or female doing the jobs they listed.

FOLLOW-UP: Students listed specific reasons why the jobs they chose could or could not be performed by an adequately trained person of each sex.

CLUSTER: All Fifteen

SUBJECT: Typing II

GRADE: 10-11

DEVELOPED BY: Joyce Martin

RELATED TO: Job Seeking Skills

GOAL: To develop an awareness of sex-role stereotyping in job seeking

CAREER EDUCATION OBJECTIVES:

To examine stereotyping in want ads
To develop skill in selling oneself in a letter of application
To look for signs of stereotyping on employer application forms
To learn how to write a resume
To analyze a video tape for role stereotyping in a job interview
To experience a job interview with a community employer
To become familar with appropriate follow-up techniques after the interview
To discuss job attitudes

PROCEDURE:

I. Want Ad:
   A. Use the Want Ads of a newspaper to find a position that you are interested in applying for. If you cannot find an ad, compose an ad for a position that would interest you. Write a short paragraph indicating WHY you chose this position.
   B. Show the filmstrip: Jobs and Gender and discuss.
   C. Provide the students with one page of want ads. Have the students review the ads describing each position as to whom they see best qualified to do the job eg. male, female, either sex. Make three columns on the board. Head each column with one of the following: Male, Female, Both. Have students identify the jobs as they have placed them in each category. Discuss the characteristics that appear to typify what is male and what is female. Examine WHY this happens. Re-examine the ad for the position that you selected. Does your position fit into the categories? If it does, where would you put it? Are you still interested in pursuing this career?
   D. Show the filmstrip: Masculinity and Femininity. Use some of the questions in the guide to initiate discussion.
      Bring in Booklet: Sex Female.

II. Letter of Application: How to sell yourself
   A. Teach the elements that must be included in a good letter of application.
   B. Provide the students with sample letters of application.
   C. Write a letter of application that will be approved by the teacher.
   D. Type good letter on bond paper, make one carbon, type envelope, fold and insert the letter. Stress that the letter will be going to the employer who will interview them.
   E. Grading: the letter will be graded for appearance, correctness, covering all the steps in an acceptable letter of application.

III. Resume
- A. Teach the format
- B. Go over samples
- C. Type a rough draft
- D. Type a final copy with a carbon. Use the same quality of paper as used for the application letter. No errors will be acceptable on resume or letter of application.
- E. Ask persons if you can use them for references.

IV. Application Form
- A. Complete a rough draft
- B. Complete an application for a firm that would employ someone with their career interest.

V. Interview
- A. Use filmstrip: Job Interview to introduce the topic and explain way to approach the interview.
- B. Use video tape: A Male and Female student interested in a job in fashion will be interviewed for the position by a male and female employer. Have the students view the video tape and use the checklist from the J.C. Penney Kit to evaluate the interviewer and the interviewee.

  Replay video tape. Note the questions asked by the male and female interviewers. Is there a difference in the approach to the interview when an employer interviews a male and a female for the same position.
- C. Students will be interviewed by a Bristol area employer. Employer will evaluate the students interviewed. Students will fill out an evaluation of the interview.

VI. Thank you letter and Evaluation
- A. Write a thank you letter after the interview
- B. Student evaluation of the total program

VII. Job attitudes
- A. Use J.C. Penney transparencies

RESULTS:
1. Students will examine a want ad to determine signs of gender stereotyping.
2. The students will type a letter of application.
3. Students will be able to pick out descriptive phrases from application forms that indicate stereotyping.
4. The students will type their personal resumes.
5. The students will be able to list steps in good interview.
6. The students will be able to identify two job attitudes that they consider important on the job.
7. The students will explain one way to follow-up with an employer once the interview has taken place.

FOLLOW-UP ACTIVITIES:
1. The students will be interviewed by an employer from the Bristol Community.
2. Students will evaluate the experience.

CLUSTER: Public Service, Health, Transportation

SUBJECT: Women in Literature

DEVELOPED BY: Louise DiMeo

GRADE: 12

RELATED TO: Exploration of Traditional and Non-Traditional Careers for Women

GOAL: To explore cultural roles assumed by or imposed on women

CAREER EDUCATION OBJECTIVES:

To examine attitudes held by women as depicted in literature and in today's society.
To discuss the meaning of masculinity and femininity
To explore a career interest
To interview women who hold non-traditional careers
To provide an opportunity for each student to evaluate her feelings about being female

PROCEDURE:

1. The students completed a survey describing their present career interests and their plans for the future.
2. Students who were interested signed up for a Career Exploration Day in an area that interested them.
3. The students were presented with a list of women in non-traditional careers. They ranked in order of preference three persons they would like to interview.
4. The students were scheduled for interviews.
5. The students developed a list of questions that they would use to interview persons in non-traditional careers.
6. The specialist and the teacher developed a set of questions that would be addressed by career speakers.
7. Speakers for the course were identified.
8. Students evaluated the traditional career exploration day experience and the non-traditional classroom career speaker presentation and their interviews with women in non-traditional careers.
9. The students summarized their reactions to course for students in another senior English class.

RESULTS:

1. The students will be able to identify five women in the Bristol community who hold non-traditional careers.
2. The students will be able to discuss two myths about women that are currently held by our present day society.
3. Students will identify with either a traditional or a non-traditional career for herself and will explain why she made this choice.
4. The students will begin to develop the self-confidence needed to cope with the existing prejudicial practices and attitudes employed against women.
5. Students will evaluate their reactions to their career exploration assignments.

FOLLOW-UP ACTIVITIES:

1. The students will invite a group of seniors to a panel presentation where the students in the Women in Literature courses will discuss their attitude toward being female.

2. The students will evaluate the effectiveness of the semester's study of woman.

SUPPORT MATERIALS:

1. FILMS: Women in Communications

2. FILMSTRIPS: Masculinity and Femininity: Guidance Associates (with tape) (available in Career Resource Center)

3. BOOKS: See Bibliography
   Sex: Female - a booklet by Cynthia Reil and Elizabeith Noel

4. VIDEO TAPE: Women I Have Known created and written by M. Tulis Sessions

5. CAREER SPEAKERS: Journalist-Jackie Ross-Hartford Courant; Police Woman-Barbara Kenney-Bristol Police Dept.; Real Estate Agents; Country Manor; Psychologist-Doris Heyman-Mental Health Clinic; Public Affairs Manager- Shirley O'Shaughnessy-Telephone Company; Travel Agent-Angela Gionfriddo; Physician-Dr. Katherine Ill

6. EXPLORATION SITES: Interior Decorator-Arruth; Medical Techmician-Bristol Hospital; Travel Agent Secretary-Globe Travel; Broadcaster-WBIS; Accountant-Bertrand Rouleau; Stenotypist-Circuit Court; Licensed Practical Nurse-Forestville Nursing Center; G Fashion Merchandising-Dorothy's; Social Worker-Bristol Community Organization; Nursery School Director-Cubby Land Nursery School; Mentally Retarded-Greene Hills; Special Education-Ivy Drive; Nurse-Forestville Nursing Center; Newpaper Photographer-Bristol Press; Black Belt Karate

7. DECISION-MAKING ACTIVITIES: Woman/Man: The Classic Confrontation. A Psychology Today Game. Communications/ Research/Machines Inc., 1971.

CLUSTER:

SUBJECT: World History

DEVELOPED BY: Dorothy Mader

GRADE: 10-11

RELATED TO: Industrialization

GOAL: To show the role of woman during the industrail revolution

CAREER EDUCATION OBJECTIVES:

To make students aware that women were essential to the development of an Industrialized Society, and that they shared equally in the unsanitary and dangerous working conditions of the nineteenth century factory or coal mine.

To recognize that a cultural stereotype of woman can influence their view of women's work, but that stereotype may not even be valid for some of their women acquaintances today.

PROCEDURE:

1. Students will study documents from The Human Adventure, Vol II., (Eisen and Fitler, Harcourt, Brace and World) and will discuss their emotional responses to descriptions of women, or children, exposed to dangerous working conditions, as opposed to their responses when only working men's exposure is described. They will be asked what part their T.V. viewing may play in their image of women's role as protected from danger. A brief discussion of the types of work their mothers engage in may also follow.
2. Students will read about the Chartist Movement in England and the early Union Movement in America. They will draw the conclusion that only men took part in these movements for social and political justice. Students will then read selected extracts from The Making of the Working Class by EP Thompson and be shown slides prepared from The Illustrated History of American Labor, in both of which women's participation in the labor movement is documented. They will then be asked to write an essay attacking or defending the thesis "women have played no important part in political and social change during the period 1800 to 1850." Students will meet in two groups, those who have attacked and those who have defended the thesis. They will gather other evidence to support their position. They will then debate the issue in front of a group of students from another class. Videotape and play back to students for their evaluation of the debate.

RESULTS:
1. Students will be able to list three contributions made by woman to the industrial revolution.
2. Students will be able to explain what part T.V. viewing may play in their image of women's role as protected from danger.
3. Students will write an essay attacking or defending the thesis: "Women have played no important part in the political and social change during the period 1800 to 1850."

FOLLOW-UP:
1. Write a paper on the activities of influential women, or womens groups during the period 1850 to 1975.
2. Get student reactions to the whole unit by their responses to a question sheet on their perception of attitudial changes in themselves and in the class.

BIBLIOGRAPHY OF NON-SEX

BIASED MATERIALS

BUSINESS

Compiled by: Joyce Martin

BOOKS

Baggett. Exploring Data Processing Careers. New York: South-Western Publish Co., 1975.

Blackledge, Blackledge and Keily. The Job You Want - How To Get It. New York: South-Western Publishing Co., 1975.

Eggland, Steven A. Exploring Wholesaling and Retailing Careers. New York: South-Western Publishing Co., 1975.

Fries, Albert C. and Dean Clayton. Timed Writings About Careers. New York: South-Western Publishing Co., Second Edition, 1975.

Gregg Tests and Awards, '75 - '76. New York: McGraw-Hill Book Company, 1975.

Kushner and Keily, How To Find and Apply For A Job. New York: South-Western Publishing Co., 1975.

Reel, Rita M. and Robert A. Restau. Exploring Secretarial Careers. New York: South- Western Publishing Co., 1975.

Restau, Robert A. Exploring Clerical Careers. New York: South-Western Publishing Co., 1975.

PERIODICALS

Thomas, Edward G. "Perceptions of Business Teachers and Business Education Majors Regarding the Roles of Women". Cleveland State University, Cleveland, Ohio, 1975.

DISTRIBUTIVE EDUCATION

Compiled by: Dan Viens

BOOKS

Bodle, Yvonne Gallegos, Retail Selling, McGraw-Hill Book Company, Gregg Division, 1972.

Feldman, Robert; Levy, Leon; Reich, Edward: Basic Retailing and Distribution, 2nd edition, Pitman Publishing Corporation, New York, 1970.

Samson, Harland E., Wingate John W., Retail Merchandising, South-Western Publishing Company, 7th edition, 1968.

BOOKLETS

Canini, Patrick, Law Know How For Distributive Education, Ohio Distributive Education Materials Lab.

Canei, Robert, Training In Your Community For Tourism, Ohio State Distributive Education Materials Lab.

Doup, Harold E. Success: A Teaching Unit About Job Application Forms, Ohio Distributive Education Materials Lab.

Hephner, Tom, Industrial Sales Decision - Making, Ohio Distributive Education Materials Lab, 1975.

Storms, Charles A., Survival In The World Of Work. Ohio Distributive Education Materials Lab, 1975.

PERIODICALS

Berkin, Bernard. "Career World: Careers In Selling". Volume 3, No. 9, Curriculum Innovation Inc., 1975. (Magazine)

FILMS-FILMSTRIPS-KITS

"Anatomy of a Sale". Filmstrip, cassette, Sears Roebuck & Co., Consumer Information Series, 1972.

"Livelihoods". Filmstrip-cassette, Houghton, Mifflin Company, Personal Services, Communication and Media, Recreation and Hospitality.

"The Art of Selling". Sagraves, A. Todd, transparencies, Selrite Inc., 1975.

"Careers", Parker Brothers.

ENGLISH

Compiled by: Dolly Ritchie

BOOKS

Aristophanes "Lysistrata". NY: New American Library, Inc., 1958.

Benet, Mary Kathleen. The Secretarial Ghetto. NY: McGraw-Hill Book Company, 1972.

Howe, Florence. "Sexism in Education and the Aspirations of Women", Changing Education, Vol. 5, No. 4, 1974.

Kaufman, Sue. Diary of a Mad Housewife. NY: Bantam Book, 1967.

Sexism in Education. Emma Willard Task Force on Education, Minneapolis, Minnesota 55414, 1972.

Shylman, Alix Kates. Memoirs of an Ex-Prom Queen. NY: Bantam Book, 1973.

Stern, Marjorie. ed. Changing Sexist Practices in the Classroom. Washington, D.C. 20005: AFT, AFL-CIO, 1974.

Spark, Muriel. The Prime of Miss Jean Brodie. NY: Dell, 1974.

GAME

Woman and Man - The Classic Confrontation - Psychology Today Del-Mar, California 92014.

FORGEIGN LANGUAGE

Compiled by: Donna Russo

BOOKS

Kaminar de Mujica, Barbara, and Guillermo Segreda. A-LM Spanish Level One. New York: Harcourt, Brace and Jovanivich, Inc., Second Edition, 1969.

Kaminar de Mujica, Barbara, and Guillermo Segreda. A-LM Spanish Level Two. New York: Harcourt, Brace and World, Inc., Second Edition, 1970.

Turk, Laurel H., and Edith M. Allen. El Espanol al dia, Book I. Lexington, Mass.: D.C. Heath and Co., Fourth Edition, 1973.

Turk, Laurel H., and Edith M. Allen. El Espanol al dia, Book II. Lexington, Mass: D.C. Heath and Co., Fourth Edition 1973.

Valette, Jean-Paul, and Rebecca M. Valette. French I for Mastery. Lexington, Mass: D.C. Heath and Co., 1975.

GUIDANCE MATERIALS

Compiled by: Clarice Stevens

BOOKS

Stacy, Judith; Bereaud, Susan and Daniels, Joan (Eds.). And Jill Came Tumbling After: Sexism in American Education. New York: Dell, 1974.

PUBLICATIONS OF THE GOVERNMENT

National Institute of Education, Career Education Program. "Guide lines for Assessment of Sex Bias and Sex Fairness in Career Interest Inventories". U.S. Department of HEW, NIE, Washington, D.C. 20208

National Institute of Education, Career Interest Program, Diamond, E. (Ed.), "Issues of Sex Bias and Sex Fairness in Career Interest Measurement". Washington, D.C. 20208

U.S. Office of Education, "Nonsexist Education for Survival: Final Report Sex Role Stereotypes Project, USOE - 0-72-2507". U.S. Dept. of HEW. July, 1973.

U.S. Dept. of Labor, "Women and Work". Office of Information, Publications and Reports. Washington, D.C. 20210

PERIODICALS

Bem, Sandra L. and Daryl J. "Training the Woman to Know Her Place: The Social Antecedents of Women in the World of Work". Division of Pupil Personnel Services, Pennsylvania Dept. of Education, Harrisburg, PA 17126

Broverman, Ing K., et al., "Sex-Role Stereotypes and Clinical Judgements of Mental Health". Journal of Consulting and Clinical Psychology, Vol. 34, No. 1, 1970

"Counseling Women" Issue, The Counseling Psychologist, 4, #1, 1973, Washington, D.C. APA

Gardner, J., "Sexist Counseling Must Stop", Personnel and Guidance Journal, 1971, 49, 705-14

Harmon, L.W., "Sexual Bias in Interest Testing", Journal of Counseling Psychology, 1970, 17, 22832

Jawley, P., "Perception of Male Models of Femininity Related to Career Choice", Journal of Counseling Psychology, 1972, 19, 308-13

Pietrofesa, John and Schlossberg, Nancy. "Counselor Bias and the Female Occupational Role". Detroit: College of Education, Wayne State University, 1970.

GUIDANCE MATERIALS (Cont.)

Stebbins, Linda, Ames, L.A., Rhodes, I., Sex Fairness in Career Guidance, Cambridge, MA: Abt Associates, 1975.

FILMS - FILMSTRIPS - KITS

"Growing Up Female: As Six Beocme One". Film by Julia Reichert and James Klein. 16mm b/w, 50 min. New Day Films, P.O. Box 315, Frankling Lakes, N.J. 07417

"Identity: Female". kit from Education Division, Dun, Donnelley Publishing Corporation, 666 Fifth Avenue, New York, N.Y. 10019

"Images of Male and Female in Elementary School Textbooks". Slides and audio-tape by Dr. Lenore Weitzman and Diane Rizzo. Resource Center on Sex Roles in Education, National Foundation for the Improvement of Education, Washington, D.C. 20005

HOME ECONOMICS

Compiled by: D. Wiecek

BOOKS

Ames, Louise Bates. Child Care and Development. Philadelphia: J.B. Lippincott Co., 1970.

Fleck, Henrietta, PH.D. Introduction to Nutrition. 2nd edition. New York: Macmillan Company, 1971.

Hughes, Osee, and Bennion, Marion. Introductory Foods. 5th edition. New York: Macmillan Company, 1970.

Hurlock, Elizabeth B. Child Development. 5th edition. New York: McGraw-Hill Book Comapny, 1972.

Klemer, Richard H. Marriage and Family Relationships. New York: Harper and Row, Publishers, 1970.

Landis, Judson T. and Landis, Mary G. Personal Adjustment, Marriage, and Family Living. 5th edition, Englewood Cliffs, New Jersey : Prentice-Hall, Inc., 1970.

Medved, Eva. The World of Food. Lexington, Mass.: Ginn and Co., 1973.

Morr, Mary L., and Irmiter, Theodore F. Introductory Foods: A Laboratory Manual of Food Preparation and Evaluation. New York: Macmillan Company, 1970.

Riker, Audrey Plam, and Brisbane, Holly E. Married Life. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1970.

Troelstrup, Arch W. The Consumer in American Society: Personal and Family Finance. New York: McGraw-Hill Book Co., 1974.

FILMSTRIPS

"Careers in the Fashion Industry". Butterick Fashion Marketing Co., 161 Sixth Avenue, New York, N.Y.

"Careers in the Food Industry". Butterick Fashion Marketing Co., 161 Sixth Avenue, New York, N.Y.

INSUSTRIAL ARTS

Compiled by: Louis Palazzo

BOOKS

Berg, Edward. Mechanical Drawing. Millwaukee: Bruce Pub. Co. 1966.

Rollain, Philip. Exploring Electricity and Electronics. Delmar Pub. 1971.

Carlson, Darvey. Graphic Arts. Bennett Co. 1958.

Dragoo, AW, Reed, Howard. Metal Work. N.Y. McKnight and McKnight 1947.

FILMSTRIPS

"The Fascinating World of Work - Machinists". National Career Consultants.

MATHEMATICS

Compiled by: Velma McAuliffe, Elizabeth Phelan

BOOKS

Holt. Algebra I. New York: Holt, Rinehart, and Winston, Inc., 1974.

Holt. Algebra II with Trigonometry. New York: Holt, Rinehart, and Winston, Inc., 1974.

Jurgensen, Donnelly and Dolciani. Modern School Mathematics and Geometry. Boston: Houghton-Mifflin, 1969.

Singer, Bertrand B. Mathematics for Industrial Careers. New York: McGraw-Hill, 1974.

Sorgenfrey, Wooten and Dolciani. Modern Algebra and Trigonometry. Boston: Houghton-Mifflin, 1973.

PHYSICAL EDUCATION

Compiled by: Joann Galati

BOOKS

Hittleman, Richard. Yoga - 28 Day Exercise Plan. Workman Publishing Co., N.Y., 1969.

Mynatt, Constance and Kaiman, Bernard. Folk Dancing for Students and Teachers. Wm. C. Brown Co., Iowa, 1970.

Self-Defense for Girls and Women. Thor Publishing Co., Ventura, Calif., 1969.

PERIODICALS

"Woman Coach". Inter-communications, Inc., Wallingford, Conn.

SCIENCE

Compiled by: Robert Quilty

BOOKS

Lawrence, Schriver, Powers, Vorhaus. Your Health and Safety. New York: Harcourt, Brace, Jovanovich, Inc., 1969.

Smallwood, Green. Biology. Silver Burdett Company, 1971.

FILMSTRIPS - KITS

"Careers in Health". Kit - Four filmstrips, each with cassette tape, Butterick Publishing, 161 Sixth Avenue, New York, 10013.

SPECIAL EDUCATION

Compiled by: Caryl McIntire

BOOKS

Hyde, John, Robert Smith, and John Travis. I Like Me. Johnstown, Pennsylvania: Mafex Associates, 1971.

Williams, V. K. Facing Life. Johnstown, Pennsylvania: Mafex Associates, 1970.

Williams, V. K. Life Today. Johnstown, Pennsylvania: Mafex Associates, 1970.

WOMEN IN LITERATURE

Compiled by: Louise DiMeo

BOOKS

Bronte, Charlotte. Jane Eyre. NY: Signet Classics, 1960.

Dennis, Patrick. Auntie Mame. NY: Popular Library, 1955.

Hardy, Thomas. The Return of the Native. NY: Charles Scribner's Sons, 1965.

Ibsen, Henrik. A Doll's House.
Hedda Gabler. NY: Bantam Books, 1958.
The Wild Duck.

James, Henry. The Turn of the Screw. NY: Segnet Classics, 1962.

Kaufman, Sue. Diary of a Mad Housewife. NY: Bantam Books, 1967.

Lurie, Alison. The War Between The Tates. NY: Bantam Books, 1973.

McCullers, Carson. The Heart Is A Lonely Hunter. NY: Bantam Books, 1940.

Mitchell, Margaret. Gone With the Wind. NY: Macmillan, 1936.

Oates, Jouce Carol. A Garden of Earthly Delights. Greenwich, CT., Fawcett Crest, 1966.

Parent, Gail. Sheila Levine Is Dead and Living in New York. NY: Bantam Books, 1972.

Plath, Sylvia. The Bell Jar. NY: Bantam Books, 1971.

Shaw, Bernard. Saint Joan. Baltimore: Penguin Books, 1951.

Shulman, Alix Kates. Memoirs of an Ex-Prom Queen. NY: Bantam Books, 1972.

Smith, Betty. A Tree Grow In Brooklyn. NY: Hayes and Row, 1968.

Spark, Muriel. The Prime of Miss Jean Brodie. NY: Dell, 1961.

WORLD HISTORY

Compiled by: Dorothy Mader

BOOKS

Eisen, Sidney, and Filler, Maurice (Eds.). The Human Adventure: Readings in World History. N.Y.: Harcourt, Brace, and World, 1964.

Franz, Nellie. Englishwomen Enter the Professions. Cincinnati, Ohio: Columbia University Press, 1965.

Hanscom, James; Hellerman, Leon; and Posner, Renald (Eds.). Voices of the Past: Readings in Modern History. N.Y.: The Macmillan Company, 1967.

Kraditor, Aileen. The Ideas of the Woman Suffrage Movement: 1880-1920. Cincinnati, Ohio: The Columbia University Press, 1965.

Thompson, E. P. The Making of the English Working Class. N.Y.: Pantheon, Random House Inc., 1963.

Vicinus, Martha (Ed.). Suffer and Be Still: Women in the Victorian Age. Bloomington, Ind.: Indiana University Press, 1960.

Wallbank and Schrier. Living World History. Chicago: Scott, Foresman and Co., 1964.

FILMS

Mirror of America. 16mm black/white 35 mins. National Audiovisual Center, Washington, D.C. 20409

Malawi: The Women. 16mm color 15 mins. Churchill Films, 662 N. Robertson Blvd, Los Angeles, Calif. 90069

Attachment B

Fellow Career Education Practioners:

The enclosed materials are being sent to you under a grant awarded to the Bristol Career Education Program by the United States Office of Career Education. They consist of three career education curriculum guides(K-6,7&8,and 9-12); booklets on the Bristol Shadow Exploration Program (for 7th and 8th grade students),the Bristol Exploration Day Program (grades 9-12), and the Bristol Placement Program; and several pamphlets covering our overall K-12 program, resource center, and placement program.

It is our hope that you will find many useful ideas contained in these materials and be able to pass them on to your career education associates in your state or city. We are also most anxious to receive any information concerning your career education program that you may be able to provide to us. The more information we can collect in response to our mailing of these curriculum materials the better-both from our point of view and that of the U.S. Office.

If you can send any information on your program, our address is:

Bristol Career Education Programs
237 Wolcott Street
Bristol, Connecticut 06010

attn: Mr. R. Edmondson or Mr. R. Matt

Thank you for your cooperation and, once again, we hope that you can put these materials to good use.

Sincerely,

Robert J. Edmondson

Robert J. Edmondson, Director
Career Education Programs

Richard J. Matt

Richard J. Matt
Dissemination Program Coordinator

May 1976

TO: Career Education Specialist
Career Education Project Directors
Guidance Personnel

FROM: Bristol Public Schools Career Education Center
P.O. Box 450
985 Farmington Avenue
Bristol, Connecticut 06010

Recently you received a packet of three curriculum guides prepared by the Bristol Public Schools Career Education Center. In order to assess the value of the program "Penetrating School Strata Through Career Education", please take a few minutes from your busy schedules to check the following statements where applicable.

/_/ The curriculum guides were mainly used for reference/resource purposes in the career education library.

/_/ The curriculum guides were used on a restricted basis for administrators and supervisory personnel.

/_/ The curriculum guides served as resource materials and/or were incorporated into the regular curriculum.

/_/ Portions of the curriculum guides were reproduced for dissemination to faculty and staff.

/_/ The total document was reproduced and disseminated to the faculty and staff.

/_/ Intend to use total guide or portions thereof in the future.

/_/ Did not use the curriculum guides.
Reason: /_/ not applicable /_/ unacceptable /_/ no reason

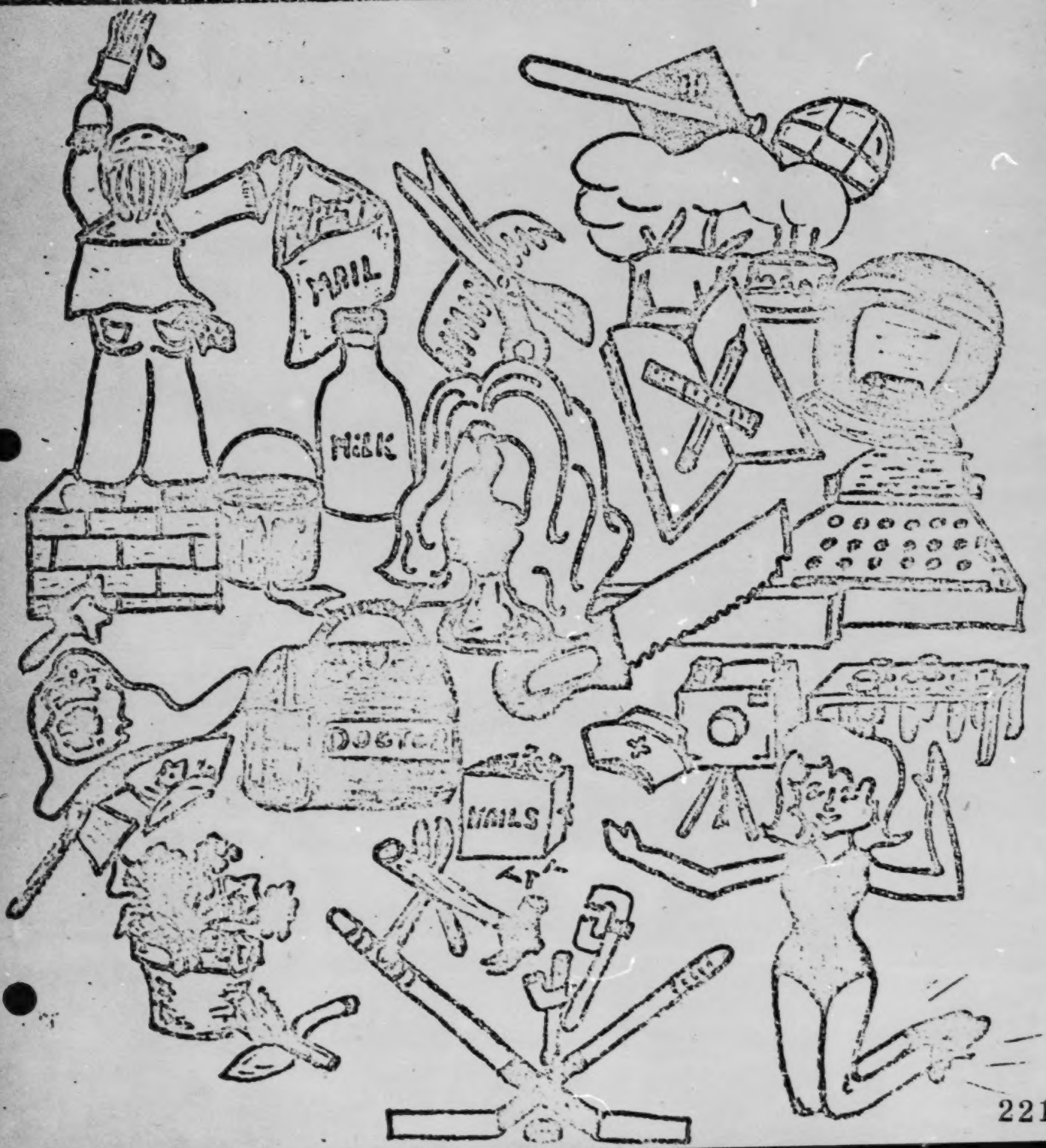
/_/ Does your district have an organized curriculum guide for career education. /_/ Yes /_/ No /_/ In process

Would you be willing to share your curriculum materials with other school districts? /_/ Yes /_/ No

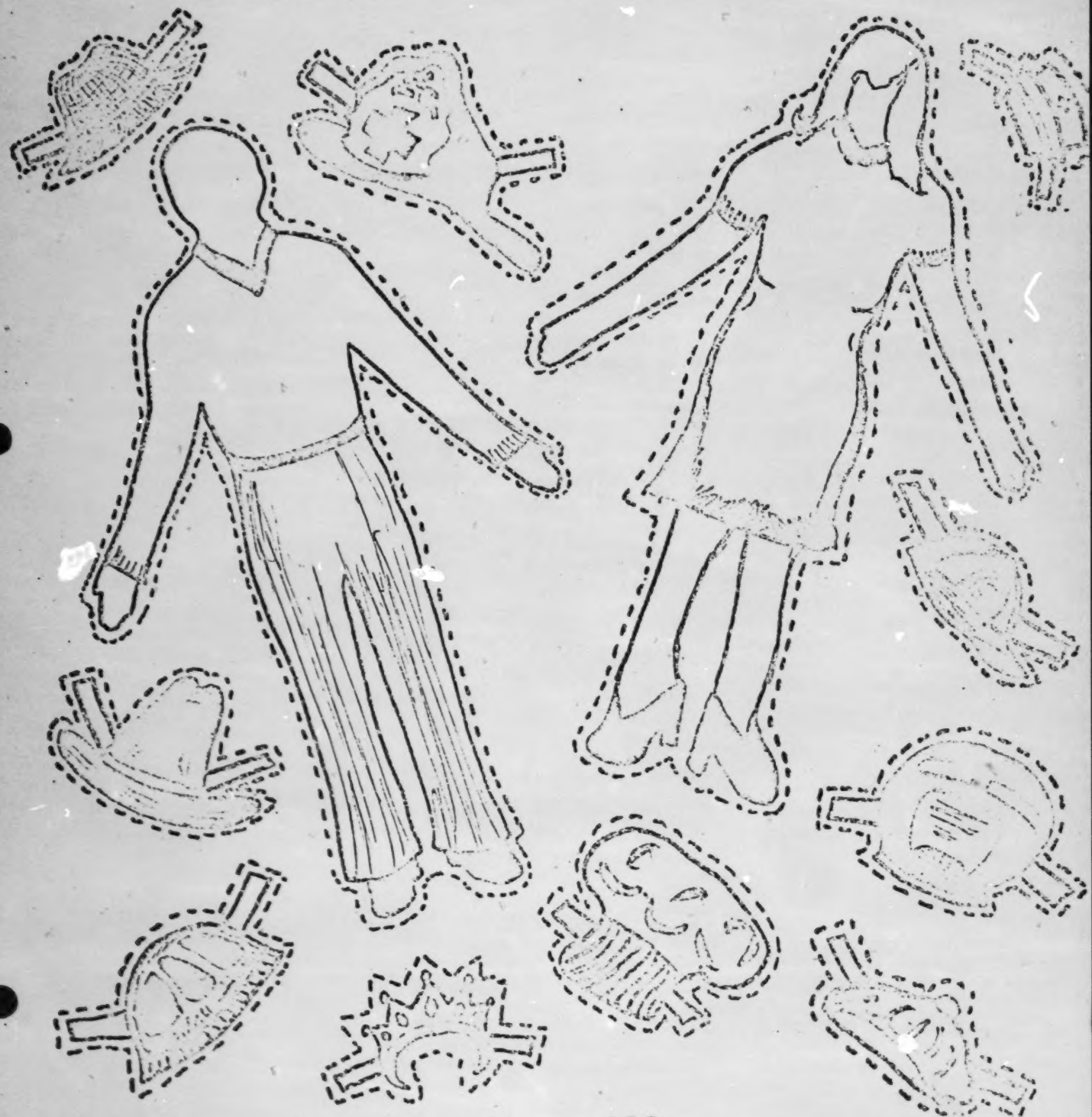
Comments:

Thank you for your cooperation. Please return this check-list in the post paid envelope provided.

CAREER EDUCATION CURRICULUM GUIDE GRADES K-6



CAREER EDUCATION CURRICULUM GUIDE GRADES 7-8



Attachment C3

BRISTOL EDUCATION CAREER CURRICULUM GUIDE FOR GRADES 9-12

Sold and Female 34

...ROGRAMMER ... PORTRAN ... Salary ...$9,500. Requires 2 to 3 years Portran, PL 1, BAL and some COBOL. Excellent advancement opportunity with mfg. Conn. Corp. Must have BA or BS degree. Call Jerry Drew, PERSONNEL RECRUITERS, 18 Asylum. 549-3221.

...ROGRAMMER
...w opening in active data ...ing department for individual with at least 2 years experience in assembly languages, and/or knowledge of NCR Neat/3.
Hospital background helpful. Attractive salary and benefit program.

MOUNT SINAI HOSPITAL
Mrs. J. Glotzer, Personnel
242-4431, Ext. 464
An equal opportunity ...

Plate and Female 34

...SN OR LPN Night shift. Full or part time. Holiday, vacation and insurance benefits. For interview call Lewington Convalescent Home, New Britain, ...

...RNS 3-11 SHIFT and 11-7 (N-9). Full or part time. Apply in person, Plainville Convalescent Home, 269 Farmington Ave., Plainville.

RN

OPERATING RM. ASS'T SUPV.

Excellent opportunity for individual ... operating room supervisory ... to join the management team ... 302+ bed hospital. 83 ... bread. Newly expanded OR ... studies 10 rooms. Salary commensurate with experience plus excellent ... benefits.

MOUNT SINAI HOSPITAL
Mrs. J. Glotzer, Personnel
242-4431, ext. 464

SALES
ACCOUNT REPRESENTATIVE

Unusual opportunity for rapid advancement with well established expanding Conn. firm. Direct contact with small business and professional firms. Salary draw plus commission. First year potential $12,000 plus. For interview call 233-8548.

SALESMAN
...Air purification equipment in ...high earnings investigate ...
CALL
633-795...
...day 9-5:30 ... p.m.
Ask for ...

...GRANEE, D... welcomed ... opportunity. ... IN...

TWO WAYS TO EARN A COLLEGE SALARY WITHO... 4 YEARS OF COLLEGE

1. Operation of IBM Computers
2. Programming of IBM Computers

Operations Course Completed in 6 Months
Programming Course Completed in 8 Months

We have one of the ... placement records in ... Our graduates are employed in over 130 major ... Fe...

...ER PROCESSING ...STITUTE
...rd, Conn. Tel. 528-921...

34 Male, Female

...JOURNALIST WITH ... ...sham experience ...

...PROGRAMMER ... Vocational ... COBOL ... or [illegible] to $14 ... GROUP, 111 ...

PROGRAMMER for upland-center analysis opportunity ... systems, TP, etc. (DOS ... cellent potential, ... training, career development, $13,500. Fee paid. ACCESS ... 111 Pearl, 527-7557.

PROGRAMMER ANALYST 3 years ... more experience. Know COBOL ... & Financial applications. Send ... sume to Personnel Dept., Colt ... arms, 150 Huyshop Ave., ... Conn. 06102.

...IC RELATIONS ... training program. ... community. Start now ... 566-1970.

PURCHA... EXPE...

Minimum 2 ... high volume ... resume and ...

COURANT BOX 826-Z

RATER. Career oriented. Experienced SMP Fire Commercial Lines. Free parking. $5725 yearly. Call Marilyn Williams. 529-9691. SNELLING & SNELLING of East Hartford.

REAL ESTATE SALES leading company looking for well qualified sales persons prepared for full time career. 4 ground floor offices in Avon, West Hartford, Bloomfield, Wethersfield plus one in Glastonbury. Excellent training, associates, and company name you'll be proud of. Commissions only. Call Bob Barrows, 236-4261, The Barrows Co., 14 Raymond Rd. West Hartford. Equal Opportunity Employer.

REAL ESTATE SALESMAN Needed-be your own boss, yearly salary is determined by your own initiative. Conn. real estate license required. For confidential interview, call Dieac Keys Real Estate, 528-9031.

REGISTERED NURSES Staff nurse positions available at Blue Hills Hospital Alcohol & Drug Dependence Division. $10,751.00 to start, fringe benefits including medical insurance, retirement plan, life insurance, vacation, sick and personal leave time. Call personnel, Monday through Friday 9:00 a.m. to 4:00 p.m., 566-3595. An equal opportunity employer.

RESEARCH PROGRAMMER ANALYST

...2 years experience in design and ...programming in a higher level language. PDP 11 computer systems. Excellent fringe benefits. Send resume to: University of Bridgeport ...

...willing to train ... sales oriented—state ... ate or individual ... college & solid ... established account ... salary & ... Pays Fee. Call ... and a ... view "Confidence ... HALLMARK ... struction Pla...

SALES ... positions ... SEEK...

SALES ... Manufacturers ... Call 563-... and explore ... opportunities. 1600 Silas Deane Highway, Wethersfield Hill, Conn.

SALES Full time, part time. Excellent opportunity to let your personality go to work for you. If you enjoy meeting people and want to offer a necessary service for an honest price, call Fiber Masters, Inc., 247-2717.

SALES PERSON for career in modern communications, attractive commission, full or part time, must have own car, no collections. Call 233-4431.

SALES MANAGEMENT TRAINEE Fastest growing local agency requires top sales people with degree and prior sales experience. Potential income $10K. Contact Bill LeBlanc, Training Manager, 247-7913.

SALES
SALES MANAGEMENT

I am looking for a man who is capable of earning $20,000-$50,000 per year. Must have management ability. Applications held in strict confidence. Call for personal interview.

643-4545

An equal opportunity employer

SALES AND SERVICE. Greeting cards to retail shops. Experience helpful or will train. Good income to steady ...

...Salary ... commission. $55...

...ERS Part time, ... resting work. We ... at E. P. Hayes ... Ave., Rocky Hill.

...ERS WANTED to ... train. Call 282-...

...fied responsible ... firm. Typing and ... $540 monthly. Call ... 529-7691. SNELLING & ...LING of East Hartford.

SECRETARY with skill in typing and transcribing, knowledge of bookkeeping helpful. Salary range from $5,824 - $6,535, commensurate with experience. Call Mrs. Isherwood, 522-8241.

SECRETARY. Law office. Good typing, willingness to use IBM mag card and dictating equipment. No legal experience needed. Shorthand desirable but not necessary. 423-2516.

SECRETARY

Good typist, good with figures, administrative ability, energetic and dependable, shorthand not required. Send resume and salary requirements to:

COURANT BOX 826-Z

SECURITY GUARD. Responsible mature person to work in larger company. Good personality a must. Security experience desired but not necessary. $1.54. TEMPLE EMPLOYMENT, 250 Main St., 527-5131.

SERVICE MANAGER WANTED. Must be able to handle men and have complete control of service department. Volkswagen experience required. All company benefits and car furnished. Contact Thomas Schwartz at the New London Turnpike, Glastonbury, Ct. ...

WANTED FULLY EXPERIENCED ... and 4 color top notch camera ... and stripper for well established printer send resume to Courant Box 826Z. Our employees are aware of this ad.

WHY PAY PERCENTAGES? To find suitable employment. Many full part time positions. JOBSEEKERS, 563-1070.

WILLING TO TRAIN? Full time position for cleaners, $3.00 hourly. Call JOBSEEKERS, 563-1070.

YES, 1975 Will be a Big New Year for you too. United Consumers Club (social and savings), is looking for together people, for sales. Allow yourself the opportunity, just work. Guaranteed income plus plus. Appointments only please. 678-1027. 10 a.m. to 6 p.m.

X-RAY
CHIEF INSTRUCTOR

Accredited school of radiology has opening for experienced Technical Coordinator to direct efforts of school. Position requires an R.T., previous experience as school director, or a minimum of 3 years teaching experience. Excellent opportunity to direct school in one of the best Radiologic facilities in area. Management team, salary and benefits.

MOUNT SINAI HOSPITAL
Mrs. J. Glotzer, Personnel Assistant
242-4431, ext. 464
An equal opportunity employer

1975 223

BUSINESS M... NEED SECRETA...
Enroll no...
10 week co...
Begins Early Ju...
SPEEDWRITI...
SHORTHA...
TYPING
(Beginner or Adv...
Call or vi...
Hartford Secretari...
19 Woodland...
522-2638

LEARN THE ART OF ... fors conditioning, grooming, ... Fencing, Acrobatics ...

LEARN TO ...
Tractor Tr...
NEW ...
ENGLA...
TRACTO...
TRAILE...
TRAININ...
MAIN S...
SOMERS, CO...
Train full or pa... for a correspondence ...
AS SEEN ON ...
FOR FREE BRO...

Attachment D

Bristol Career Education Center

Career Placement Service Guide

Robert J. Edmondson
Director, Career Education Program
Bristol Board of Education
985 Farmington Avenue
Bristol, Connecticut 06010

January, 1975

CAREER PLACEMENT SERVICE GUIDE

Project No. V361170

Grant No. OEG-0-73-5301

Penetrating School Strata
Through Career Education

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The placement guide reported herein was performed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Robert J. Edmondson
Director, Career Education Program
Bristol Board of Education
985 Farmington Avenue
Bristol, Connecticut 06010

January, 1975

CAREER EDUCATION CENTER

Bristol, Connecticut

Introduction

The following is a provisional guide for the Bristol Career Placement Service Program.

This guide is designed to describe the object of the placement function and includes a description of the process, forms, and reporting which are all integral parts of a thorough placement system.

Revisions and/or changes can and will be made, when necessary, as the program develops. Input for making such changes will come from the following groups:

1. Career Education Guidance Specialists
2. Career Education Planning Committee
3. Career Education Advisory Board
4. Employers
5. Students effected by this program
6. Any representative from the teaching, counseling, or administrative ranks of the school system and/or community representatives having a direct relationship with this program.

TABLE OF CONTENTS

I Goal Statement

II Statement of Objectives for Career Placement

III Statement of Processes for Career Placement

IV Description of Forms used in the Process

V Reporting of Functions

GOAL STATEMENT

To provide a Career Placement Service to terminating Secondary students (whether graduating or withdrawing) of the Bristol Public and Parochial High Schools.

STATEMENT OF OBJECTIVES

I To locate and isolate significant Career Job opportunities in the community which can be offered to exiting Bristol students.

II To offer such job oppotunities to said students through a system which allows for clear and precise communications between employers, students, and concerned education officials.

III To utilize information retrieval forms which permit a matching of student interests and abilities with job specifications.

IV To develop processes which allow for the rapid identification of exiting students who would be interested in using this placement service.

V To provide for the following systems within this placement service:

a) Reporting

b) Referral

c) Follow-up analysis

d) Program revision

STATEMENT OF PLACEMENT PROCESSES

The following is a description of how the Career Education placement program works throughout the Bristol School System:

I Job Retrieval: Working in cooperation with the Bristol Chamber of Commerce, Career positions are solicited from businesses and industry. These positions must offer career possibilities to exiting Bristol high school students. Such jobs are solicited from the community in such a way that a prospective employer needs to make only one telephone call (to the Bristol Career Education Center) to place a job order.

In addition to soliciting through the Bristol Chamber of Commerce, attempts have been made to notify employers that this service exists, and how to use it, in the local news media (WBIS and Bristol Press.)

II Job Distribution: Upon receipt of a job order, the Bristol Career Education Center completes a form indicating employer specifications and requirements for each position ordered. This form then is distributed to the three participating high schools. At this point the job order is utilized as a guide to determine the best qualified potential employees. This is done through a matching process; students have noted their set of qualifications, training experiences, and interest areas on a standardized form. Career Education Specialists and the school's guidance staff can identify those students who are well matched for a particular set of job specifications.

III Student Information Retrieval: As indicated above, each student who has a potential interest in employment is identified. This is done through three methods:

1. The Senior Survey, conducted annually, to determine the immediate future plans of exiting graduates. This form contains a section of questions which allows for this identification process.

2. Through oral communications with graduating and withdrawing students. This process is accomplished primarily through student/counselor contacts. However, the counselor is not the only possible referring agent.

3. Public Service announcements made by local news media agencies.

Upon identification of interested students , each individual is requested to fill out two forms:

1. The Student Placement Form; which is a device for the storage of information concerning each student and how the placment function has been of service to that individual.

2. The Personal Data Sheet; which is basically the student's resume. It is from the information provided by the student on this form that permits the matching function to be carried out by specialists and/or counselors. This form accompanies the student when the individual has been referred to a possible employer. It should be copied by the student before going out on a referral. The copy must be retained by the specialist/counselor team in order to allow for subsequent matches and referrals. In the event of several referrals being made all at once, for each student,

that individual should be provided with enough copies of the Data form to cover the number of interviews he will have.

IV Student Referrals: Upon matching a job order with a well qualified applicant, the specialist/counselor team then will refer such individuals to the prospective employer. This is done by providing to the applicant a copy of his Personal Data Form. The individual is then given a completed Referral Card. Both of these are to be taken to the prospective employer. If one of our referred candidates is hired, the Referral Card has instructions to employers on notifying the Career Education Center that a placement has, in fact, occurred.

V Follow-Up: Two types of follow-up activity are important to this service.

1. Referral Follow-Up: Each time an individual is referred to a possible job, his name and the date are recorded on the specialist's copies of the Job Order Form. In addition, the pertinent information is also recorded on the student's Placement Form. All Job Order Forms are updated weekly by the three Career Education specialists. Any placements that do occur are called into the Career Education Center so that the related job order can be terminated. This information is then provided immediately to all specialists involved.

2. Placement Follow-up: After a student has been placed in a position and has held it longer than 3-5 weeks, a representative of the school system will conduct a visitation follow-up. This will provide an accurate assessment of how the placement function has been of assistance-both in concrete and subjective terms.

PLACEMENT

FORMS

1. JOB ORDER FORM
2. STUDENT PLACEMENT FORM
3. PERSONAL DATA SHEET
4. REFERRAL FORM

BRISTOL CAREER EDUCATION CENTER
Job Order Form

Employer's Name	Number Openings	Number to Refer	Occupational Title	
	Time Limit to Fill	Employer's Job Title		
Address	Start Work	Sex Male___ Female___	Age Preferred	Minimum Age
Telephone	Rate of Pay	Duration		
Person to See-How to Reach-When		Hours, Days, of Work		
Job Performance, Requirements, Work Preformed, Equipment, Methods, and Material Used, Physical Activities, Working Conditions			Date of Original Order	
Skill, Knowledge, Ability				
Employer Acceptance Requirements: Medical, Experience, Education, Training				

REFERRALS

Date	Int.	Name	Action	Comments

BRISTOL CAREER EDUCATION CENTER

STUDENT PLACEMENT

STUDENT _____ _____ GRADE ___ AGE ___ M __ F ___
Last First Middle

BIRTH DATE _____ S.S.# _____ APPLICATION DATE _____
Mo. Day Year

ADDRESS _____ HOME PHONE _____

TYPE OF WORK 1. _____ SALARY _____

2. _____ DESIRED HOURS _____

CAREER CHOICE _____

COMPANY SUPERVISOR _____

ADDRESS _____ BUSINESS PHONE _____

DATE PLACED _____

REMARKS: _____

REFERRALS

DATE	INT	NAME	ACTION	COMMENTS

FOLLOW-UP

REMARKS: _____	DATE _____

RDN:11b
5/31/74

Bristol Career Education Center

PERSONAL DATA SHEET

Personal

NAME: _____

ADDRESS: _____

PHONE: _____

AGE: _____

BIRTHPLACE: _____

HEIGHT: _____

WEIGHT: _____

HEALTH: _____

MARITAL STATUS: _____

COUNSELOR'S NAME: _____

_____

Education

HIGH SCHOOL: _____

SUBJECTS STUDIED: _____

_____

_____

_____

Work Experience

_____

_____

_____

_____

Activities and Interest

In School _____

_____

_____

_____

Out of School _____

_____

_____

_____

Special Interest: _____

_____

_____

_____

References

_____

_____

_____

Type of Work Desired: _____

_____

_____

BRISTOL CAREER EDUCATION
REFERRAL CARD
PLACEMENT

This will introduce _____ who is applying for the job _____. This student has been referred to you by the Guidance Department and fulfills, to the best of our knowledge, your requirements for this job. In order that we may better serve you and our students, would you please telephone the undersigned when you have hired an applicant for this job or desire additional information or wish to make any comments in connection with this referral.

If you actually hire this student, it is imperative that you call 584-0971, Ext. 288.

_____ B.C.H.S. Student

_____ B.E.H.S. Student

_____ St. Paul Student

_____
School Placement Official

_____
School Number

STATEMENT ON CAREER PLACEMENT SERVICE REPORTING FUNCTION

Reports are an integral part of any efficient Placement Service. Such a process provides most of the pertinent information concerning the success of the Service. In addition, any changes which should be incorporated into the Service, no doubt, will be evidenced by an accurate reporting function.

The Bristol Career Education Placement Service does have such a feedback system. Report functions will be carried out through two major processes:

I Informal Reports: In that, information storage is an integral part of the Career Placement Service, the three Career Guidance Specialists have access to all occurances in placement activity within their assigned school. Further, each specialist provides, to key Bristol educators, a weekly report function for their total Career Education undertakings. A weekly update on the Placement Service will thus provide necessary information concerning this activity.
In addition, this Service will be spotlighted in the Bristol Career Education Newsletter and The Exchange. No doubt the local news media will provide appropriate coverage for this service.

II Formal Reports: Twice per academic year the Career Guidance Specialists will compile all pertinent placement information. This compilation will be produced as a formal report. All such reports will include

the following information:

A) The Report's Title
B) The Period Covered
C) Information breakdown (by each school and then totally) as follows:
   1. Name, address, sex, age, and phone number of each student partially or completely serviced by the program.
   2. Notation of placement per student, including employer(s) name, starting salary, present salary, when placed, when terminated, duration of placement.
   3. Where appropriate, a reason for termination of any placed individual will be determined and recorded.
   4. Where appropriate, subsequent training programs for each individual will be recorded.
   5. A complete listing of employers cooperating with this service will be included.
D) A statistical summary of the total Placement Service's progress.

All such formal reports will be added to revision copies of this Guide which will be distributed appropriately. Further, they will be included in all reporting functions of the Bristol Career Education Department.

In short, every effort will be made to make this Service visable and flexible so that increasing Placement opportunities may be offered to qualified, interested Bristol students.

Attachment E

Dr. Mark R. Shedd

Walter A. Bialobrzeski

September 13, 1974

The following persons have agreed to serve on an ad hoc committee to meet with three members from the Connecticut Business and Industry Association:

Errol Terrell, Chief
Bureau of Vocational Services

Richard Wilson, Director
Research & Planning Unit

Richard Nolan, Director
-- for the development of the satellite program, Bristol Board of Education

I contacted Robert Simpson at CBIA and informed him of the composition of the Committee. He in turn will contact his representatives and will form a three man committee to meet with this group. Furthermore, Mr. Simpson will contact you or me about the first meeting.

In addition, I have made arrangements for the Education group to meet with you, Dr. Dolat and myself on October 1, 1974 at 9:00 A.M. to review the mission.

WAB:hm

Copy to Errol Terrell
Richard Wilson
Richard Nolan

BRISTOL BOARD OF EDUCATION HIGH SCHOOL SURVEY

1. GRADE (Circle One) 9 10 11 12

2. SEX (Circle One) MALE FEMALE

3. EDUCATIONAL INTENTIONS (Check One)

_____a. End education with high school.
_____b. Attend vocational school.
_____c. Attend business school.
_____d. Attend nursing program (2 to 4 years).
_____e. Attend 2-year technical school.
_____f. Attend 2-year college.
_____g. Attend 4-year college.
_____h. Other

4. If the Bristol School System considers offering some of the listed programs below, which, if any, would you have had an interest in selecting. Indicate your interests using the numbers 1, 2, and 3 to indicate your preferences. Please write the numbers on the line to the left of your choices.

_____ 1. Air Conditioning
_____ 2. Oil Burner
_____ 3. Appliance Repair
_____ 4. Auto Paint & Body
_____ 5. Auto Mechanic
_____ 6. Aircraft Mech.
_____ 7. Aviation Electronics
_____ 8. Carpentry
_____ 9. Electrical
_____ 10. Masonry
_____ 11. Painting & Dec.
_____ 12. Plumbing
_____ 13. Draft. - Mechanical
_____ 14. Draft. - Architectural
_____ 15. Draft. - Construction
_____ 16. Indust. - Electrical
_____ 17. Print & Lithography
_____ 18. Machine-Tool
_____ 19. Sheet-Metal
_____ 20. Welding
_____ 21. Screw Machine
_____ 22. Barbering
_____ 23. Beauty Culture
_____ 24. Food-Trades
_____ 25. Baking
_____ 26. Fashion Design
_____ 27. Science Lab. Tech.
_____ 28. Dietary Aide
_____ 29. Health Services
_____ 30. Dental Assistant
_____ 31. Dental Lab. Tech.
_____ 32. L.P.N.
_____ 33. Bookkeeper
_____ 34. Commercial Art
_____ 35. Data Processing
_____ 36. Radio & TV Repair
_____ 37. Electronic Tech.
_____ 38. Floral Design & Landscaping
_____ 39. Office Machine Repair
_____ 40. Springmaker
_____ 41. Child Care
_____ 42. Heavy Equipment Operator

Please list other programs you might wish to see implemented:

1._____ 3._____

2._____ 4._____

RDH:dll
1/29/74

BOARD OF EDUCATION
Bristol, Connecticut

JOB DESCRIPTION

ADMINISTRATOR FOR VOCATIONAL & CAREER EDUCATION PROGRAMS

The Administrator for Vocational and Career Education Programs shall be responsible to the Superintendent of Schools. He shall have line authority over the positions which appear below his on the Table of Organization for these programs. He shall be responsible for the administration of:

The Career Education Program
The Industrial Arts Program
The Distributive Education Program
The Springmaking Program
The Cooperative Work Experience Program
The Nursing Assistants Program
The Business Office Education Program
The Continuing Education Programs (i.e., Adult Education, Summer Schools)

He shall be the Vocational and Career Education Programs liaison between the Bristol Public School System and the State Department of Education, the Bristol Chamber of Commerce, the Bristol business and industry community, and the Bristol community in general.

He shall be the administrator responsible for guiding Bristol in developing a Master Plan for Vocational and Career Education Programs as per state mandate.

He shall establish committees, their functions, and their meeting times for the development of the Master Plan and for each of the above listed programs.

In his administration of these programs he shall coordinate the vocational-technical-business and career education programs in Bristol, and he shall assume the leadership role for the planning, development, and the evaluation of these programs.

He shall work cooperatively with the Principals, Department Heads, Supervisors, and Teachers through democratic administration and high professional standards for the best interest of the boys and girls who enroll in these programs.

Periodically, or upon request from the Superintendent of Schools, he shall prepare reports on the progress of these programs.

He shall keep the professional staff and the community informed of the progress of these programs.

He shall visit the local schools to observe the progress of these programs and he shall meet with the Principals, Department Heads, Supervisors, Teachers and committees to review his observations and make recommendations for changes to improve these programs. He shall also make available to them the latest information from state or federal sources relating to these programs.

He shall attend local, state, and national conferences to update himself and bring back to the Bristol programs pertinent information for consideration and adoption by the professional staff and committees.

He shall work cooperatively with:

The Assistant Superintendent for Personnel in the selection of staff members for these programs and for reviewing staff problems for the Assistant Superintendent's consideration and action.

The Assistant Superintendent for Instruction to discuss the overall, city-wide programs as they relate to the vocational-technical-business and career education programs.

The Director of Federal and State Grants in the preparation and follow-up of program and grant proposals.

The Principals, Department Heads, Supervisors, and Teachers for their input regarding these programs, needs for program improvements, personnel and financial needs, and other related problems.

The Principals, Department Heads, and Supervisors will work with their staffs, as they have been, in order to prepare and present budgets, personnel evaluations, and expending funds which have been appropriated for these programs, but the Administrator for Vocational And Career Education Programs shall be advised of all decisions regarding these matters so that he may be informed before budget adoptions are finalized.

The Administrator for Vocational and Career Education Programs shall be employed from July first to June thirty. He shall be entitled to the same vacation time and all the benefits enjoyed by other professional personnel in his professional group.

The salary for this position shall be determined by the Bristol Board of Education, and shall initially be set at $20,000 per annum.

SPEAKER EXPLORATION DAY AND FIELD TRIP SCHEDULE

BRISTOL CAREER EDUCATION PROGRAM

EXPLORATION DAY

BRIS DL CAREER EDUCATION PROGRAM

Exploration Day - Program Application

Name_____ Grade_____Age_____

Homeroom Teacher_____Hmrm._____

Study Halls: Period_____Days_____

_____

Guidance Counselor_____

Apecific Job to be Explored_____

Rank in order, Your preference for the day of the week that is best for you to participate in the Exploration Day Program. One would indicate your first choice.

Monday_____ Wednesday_____ Friday_____
Tuesday_____ Thursday_____
Today's Date_____

Return completed application form to_____
Indicate why you are applying for this program.

_____

_____

_____

Counselor Recommendation

Counselor_____

1. This student's career to be explored is in keeping with the student's expressed interest and ability
Yes_____ No_____

I recommend_____do not recommend_____this student for the Exploration Day Program.

Additional Comments:_____

_____

_____

BRISTOL CAREER EDUCATION PROGRAM

EXPLORATION DAY PROGRAM

Student Agreement

As a condition for acceptance in the Exploration Day Program, I agree:

1. To conduct myself in a satisfactory manner while on the job and to carry out my training in such a manner that I will reflect credit upon myself and the Exploration Day Program.
2. To be on time to the exploration job site.
3. To notify the Career Education Specialist and the exploratory supervisor if I cannot keep the scheduled appointment.
4. To be well dressed and groomed.
5. To be under the jurisdiction of_____High. School while participating in the exploration day program.
6. To complete the Occupational Information Report and to return it to my guidance counselor the following day.
7. To accept the exploratory placement assignment without pay.
8. That if I use my car for transportation to and from the exploration job site, I will observe all traffic regulations and school policies with expreme care. I will conform to all school regulations of the registration of this car.
9. To make-up all class assignments missed while on the Exploration Day job site.

I understand the statements in the student agreement and I agree to carry them out to the fullest extent.

Student Signature_____

_____

PARENT PPERMISSION

_____has my permission to participate in the Career Education Exploration Day Progrm.

I hereby release_____High School from any responsibility involved in traveling to and from the exploration day job site.

Students participating in the program must provide their own transportation.

Student accident insurance is___is not____carried on my own child. A student not having school insurance must bring 20 cents to cover the cost of insurance for that day.

Parent's Signature_____

Date_____

Dear Parent:

A Career Exploration Day Program has been initiated as part of the Bristol Career Education Program. The program has the support of the administrative staff and is conducted in conjuntion with the Guidance Department at the local high schools.

The Exploration Day Program provides an opportunity for students to observe and "try out" in a limited way conditions of work involved in a job the student feels he might one day like to hold. Having participated in the progrm, the student will then re-evaluate his suitability for the field of work.

Students in all grade levels can particioate in the Career Exploration Day Program. The program operates in this way. A student can request an Exploration Day experience. The student's request is subject to approval by the student's guidance counselor. Any student who has heard a career speaker where they are involved in a career unit are also eligible for the program.

Students participating in the program will be marked present to school on the day that they are assigned the Exploration Day Experience. However, students will not report to homeroom but will go directly to the work site at the scheduled time and spend a full day there. Students selecting the Career Exploration Day Program must provide their own transportation and are required to make-up all work missed in class that day. On the student's return to school, the completed evaluation form should be left with the student's guidance counselor.

The attached materials describe the details of the program. If you feel that the Exploration Day Program has value for your child, please sign the parent permission slip. All permission slips should be returned to the Career Guidance Specialist.

If we can be of further assistance to you, please feel free to call us. Thank you for the interest and support that you have given this Career Education Project.

Sincerely,

Principal

Bristol Career Education Program

Exploration Day Progress

Introductory Card

Firm Name_____

This will introduce_____

a student enrolled in the Exploration Day program. The purpose of this program is to combine related classroom instruction with job training and possible future careers. This student has requested an exploratory day with your company. Thank you for your consideration.

_____

Career Education Specialist

_____

Telephone Number

DATE:

TIME:

PERSON TO SEE:

PLACE:

PHONE:

DIRECTIONS:

BRISTOL CAREER EDUCATION PROGRAM

CAREER EXPLORATION DAY

EVALUATION FORM

Student Name_____

Date of Visit_____

Career Explored_____

Name and Adress of Firm

_____

_____

_____

Phone_____

Name of the person with whom the day was spent.

_____

1. What would you enjoy about this job?

_____

_____

_____

_____

2. What wouldn't you like?

_____

_____

_____

3. List some of the main duties this job requires:

_____

_____

_____

_____

EVALUATION FOR: (con't)

4. Do you possess any skills that would be needed on this job?

_____

_____

_____

5. Can you relate any course you are presently taking to the career you investigated?

_____

_____

_____

6. What are similar jobs that the indevidual might do?

_____

_____

_____

7. What could be improved about the Exploration Day Experience?

_____

_____

_____

Attachment J

CAREER EDUCATION RESOURCE CENTER

THE BRISTOL

CAREER EDUCATION PROGRAM

The Bristol Career Education News Letter
237 Wolcott Street - Bristol, Connecticut

This is the first issue of the "Exchange" for the 1975-1976 school year. The staff of the Bristol Career Education Program is pleased to be sending out its newsletter once again and it is hoped that the ideas and activities described will be useful to you.

We are presently beginning our third and last year of operation under our original federal grant. Continuation of the program beyond June 1976 is high on our list of priorities for this year. In the coming nine months we will be striving to refine our program to the fullest possible extent and make it stand as the national model we all know it to be.

Perhaps you would be interested to know that the Bristol Career Education Program has been awarded two additional grants from the federal government for programs to be conducted this year. One of these involves nationwide dissemination of our curricular materials and the other a series of in-service workshops on sex role stereotyping. Although both of the grants involve relatively small amounts of money, we are pleased to have these among the only eighty proposals funded last spring by the U.S.O.E. The competition was very stiff. Over 900 proposals were submitted.

MATH WORKSHOP SCHEDULED

A "mathematics in career education" workshop for the 7th and 8th grades has been scheduled for November 14, at St. Ann's School. This workshop was developed to instruct teachers in the use of certain career education activities developed over the summer. There will be one math teacher in attendance from each of the 7th and 8th grade schools, including St. Stan's, St. Joe's and St. Ann's. The participants will then be in a position to show other math teachers in their respective schools how to use the new materials.

A follow-up workshop to develop more math-oriented activities is now being planned for later in the year.

Last June members of the Career Education staff along with a number of students from St. Ann's school, participated in the First Connecticut Trade Show at the Hartford Civic Center. The kids were very enthusiastic and put on a great career education exhibit. Their projects on occupations from several of the career clusters were very well received by both visitors to the trade show and other exhibitors who, by the way, were all adults.

The following notes to the Career Education staff sum up the way the kids felt about their experience.

Dear Career Ed. Personnel:
I thank you for everything you have done for me and for getting me there. Thank you expecially for the dinner, and for letting us go on our break each half hour.

Thank you again,

Your Printer
Wendy

I thank you for the times you took me to the Hartford Civic Center.
The meal at MacDonalds was very good. The passes really pleased my parents. Most of all thank you for choosing me to take part in the Trade Show.

Thank you,

Scott Raymond

To the Career Education Personnel
Thank you very much for driving us back and forth to the Trade Show,

feeding us, watching over us, and helping to bring people to our booth, I really appreciate it.

Sincerely,

Danny Roy
(Electrician)

Recently, freshman students in Linda Cimadon's General Business classes were exposed to career resource material that would be available for their use during their four year stay at Bristol Eastern. The students brainstormed and developed a list of ways that they might learn about careers. The students' ideas were reviewed and the materials now available in the career resource center were raised by the students. The importance of planning for a career was stressed in the filmstrip, How To Explore the Fascinating World of Work. The students then identified their personal career goals and related their interest to a career cluster. As a follow-up activity the students will complete an awareness survey. The students will describe what they know to be the advantages, disadvantages, salary, benefits and job responsibilities of the person with their career interest.

The career Education Program at St. Paul is off to a fine start. Faculty and student response to programs has generated much activity and interest. Enthusiasm toward the Career Education activities developed over the summer and the workshops which will result has been high. The career exploration program was well received by students- many applications have already been received.

Dave Doherty, the Career Education specialist at St. Paul, will take on new responsibilities this year under a revised program. Three days a week he will be at St. Paul, while the remaining two days will be spent in the elementary program at two grammer schools. This will be the first combination of roles existing in the program: K-6 and 9-12.

Richard Matt, Resource Center Director, conducted a mini-workshop for St. Paul faculty on September 18. He discussed the use of the resource center and the availability of material to interested teachers. The workshop was well-received by those attending.

The first elementary inservice workshop for the kindergarten teachers will take place on Thursday, November 13, from 9:00 a.m. to 11:30 a.m. at Edgewood Schools's Career Education Activity Center.

On the agenda is both a sharing of information on the kindergarten curriculum packets developed this past summer by Mrs. Mary Johns and Mrs. Faith Schreiner, and an instructional session on affective education materials and techniques.

The previously described kindergarten workshop is only one of a series of inservice sessions to be sponsored this year by Career Education. During this past summer a great deal of work was done by a number of teachers selected from different subject areas and grade levels. Curriculum packets describing specific career education activities were developed for grades K-12. The current series of workshops is based upon the work done by these teachers and is designed to promote the packets throughout the school system. Teachers will be released from their classroom assignments for one half day to attend the session for their level or subject area. Those who are interested should consult their building principal. Expenses for substitutes will be covered by Career Education.

The schedule for the elementary workshops is as follows: (All workshops run from 9 to 11:30 a.m.)

BRISTOL CAREER EDUCATION PROGRAM STAFF
Frank Dolce, Elementary Awareness
Angelo Llopis, Junior High Orientation
Rich Matt, Resource Center
Dave Doherty, H. S. Career Guidance & elementary awareness, SPHS
Kathy Quinn, H.S. Career Guidance, BEHS
Ed Phelan, H.S. Career Guidance, BCHS
Bob Edmondson, Program Director

LEVEL	DATE	PLACE
K	Nov. 13	Edgewood School
1	Nov. 17	Mt. View School
2	Nov. 21	South Side School
3	Nov. 25	Bingham School
4	Dec. 3	O'Connell School
5	Dec. 4	Edgewood School
6	Dec. 8	Mt. View School
Special Ed.	Dec. 19	South Side School

The high school workshops run from 8 to 11:30 A.M. and are scheduled as follows:

Subject Area	Date	Place
General Business	Nov. 4	SPHS
Algebra II	Nov. 18	BEHS
Chemistry	Nov. 25	BCHS
Algebra I	Dec. 2	SPHS
Typing	Dec. 9	BEHS
Accounting	Dec. 16	BCHS
U.S. History	Jan. 6	SPHS
Geometry	Jan. 13	SPHS
Biology	Jan. 20	BEHS
English	Jan. 27	BCHS
Math Analysis	Feb. 3	BEHS
Soc. Studies I&II	Feb. 10	BCHS
Earth Science	Feb. 24	SPHS

The high school workshops will also feature speakers who hold jobs related to the subject area covered in each particular workshop.

New Publication From the Career Resource Center

The first update to the career education materials list published last May has been completed and is in the schools. If you wish to utilize any of the recently acquired materials described in the update, contact the Career Resource Center.

Health and Regulatory Inspectors (Gov.)
Very rapid employment growth, particularly at the State gov. level, in response to pressures for consumer protection.

Police Officers
Increased demand for protective services should create very good employment opportunities; specialized training will become increasingly important.

State Police Officers
Very rapid employment growth. As population grows and becomes more mobile, the greatest need will be for officers in highway patrols..

EDUCATION AND RELATED OCCUPATIONS

Teaching Occupations

College and University Teachers
Entrants may face keen competition throughthrough the mid 1980's. New doctoral and master's degree holders, the main source of supply, are expected to more than meet the expanding demand for college and university teachers.

Kindergarten and Elementary School Teachers
Competion is expected through the mid-1980's. If patterns of entry and reentry continue, the number of persons qualified to teach in elementary schools will exceed the number of openings.

Secondary School Teachers
If past trends of entry continue through the mid-1980's, the supply will greatly exceed anticipated requirements. Keen competition for prospective teachers although a recent survey found teacher shortages in mathematics, industrial arts, special education, and some vocational subjects.

Library Occupations

Librarians
Favorable overall opportunities, but some librarians may have to compete for jobs of their choice. Best employment prospects in public and special libraries.

11

Library Technical Assistants
Good employment prospects particularly for graduates of academic programs. Especially favorable opportunities in large public and college and university libraries.

OCCUPATIONS IN TRANSPORTATION ACTIVITIES
Air Transportation Occupations
Air Traffic Controllers
Expected increase in the number of of airplanes should result in a rapid employment increase.

Aircraft Mechanics
Very rapid employment growth as number of aircraft increases. Employment in the Federal Government, however, may fluctuate with changes in defense spending. Continued fuel shortages may adversely affect growth.

Airling Dispatchers
Little or no employment change due tO improved communications equipment.

Flight Attendants
Very rapid employment increase as aircraft become larger and increase in number. Many additional openings also will occur as attendants transfer to other occupations. Continued fuel shortages may adversely affect employment growth.

Flight Engineers
Rapid employment growth due to expected increase in the number of aircraft. Continued fuel shortages may adversely affect employment growth.

Ground Radio Operators and Teletypists
Slow employment decline due to automatic communications systems and improvements in two-way radios that permit direct communications between pilots and air traffic controllers.

Pilots and Copilots
Very rapid employment increase due to growth in the number of aircraft. Continued fuel shortages may adversely affect employment growth.

Traffic Agents and Clerks
Very rapid employment increase because of the anticipated growth of passenger and cargo traffic.

SCIENTIFIC AND TECHNICAL OCCUPATIONS
Conservation Occupations
Foresters
The annual number of forestry graduates could exceed the number of annual openings, resulting in keen competition for jobs. Opportunities also will be affected by the number of qualified entrants from other sources and the increasing use of technicians and forestry aides.

Forestry Aides
Favorable employment opportunities expecially for those with specialized post-high sohool technical training in forestry.

Range Managers
Slow employment increase. However, because hiring needs are dependent on Federal legislation, public concern for the environmental protection could create additional opportunities.

The Bristol Career Education Newsletter
237 Wolcott Street
Bristol, CT 06010

Richard Nolan
Board

NOV 21 1 38 PM '75

ADVISORY COUNCIL

OCCUPATIONAL PROGRAMS

Mr. Francis D. Amadio
Mr. A. LeRoy Anderson
Mr. George Wm. Bountress
Mrs. Winifred Coker
Mr. Mark Cote
Mrs. Mary L. DeWard
Mr. Frederick Downs
Mr. Bruce Ficinus
Mr. Edward I. Freedman
Mr. Dean Goldsmith
Mrs. Joan Guerett
Mr. Frank C. Hart
Mr. Peter G. Imperator
Mr. James McQuarrie
Mr. Richard D. Nolan
Mr. Thomas E. Norwood
Miss Susan Paganini
Miss Robin L. Ricker
Mr. William M. Schwab
Mr. Walter R. Sonstroem
Mr. Paul Soucy
Mr. John A. Stupak
Mr. Jeffrey Tedesco
Mr. Carl R. Venditto
Mr. Daniel Viens
Mr. Lew Volpicella
Mr. Stephen C. Wasley
Mrs. Edna Wisyanski
Mr. Bernard C. Wojan

CO-OPERATIVE WORK EXPERIENCE

Gateway to: New Opportunities, Better Jobs and Higher Pay

In

Office Occupations, Service Jobs, and Trade Training

Students May:

Earn One School Credit for Work-Experience
Early Release from School

Students May Experience:

Two Related Classes per Week, including Field Trips, Guest Speakers, and Vocational Guidance

C. W. E. May:

Help Students Make the Highest and Best Use of Their Ability
Acquaint Students With Money as an Incentive to Higher Achievement

Examples of Jobs for Work Credit:

Audio-Visual Clerk
Bench Workers
Carpenter's Helper
Day Care Helper
Electrician's Helper
Inhalation Therapy Helper
Secretarial
Toolmaking
Typing
Nurse's Aid and Others

Students Should See Their Guidance Counselors, or Work-Study Coordinator for Further Details.

CAREER EDUCATION

Bristol's Career Education Program offers to students, teachers, and community residents:

* Job Placement Services
* Internships
* Development of Skill Training
* Career Counseling
* Career Exploration Activities
* Career Awareness Activities
* Self-Awareness Activities
* Decision-Making Skill Training
* Life-Style Orientation Activities
* Development of Credit for Specific Courses and Life Experiences
* Career Information Resource Center

If a job, now or in the future, is your concern, please do not hesitate to call 584-0971, ext. 288.

Students should see their Guidance Counselors or call the Career Education Office.

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

SPRINGMAKING

Although the art of Springmaking has been practiced in various forms for centuries, we in the State of Connecticut, are fortunate to have the bulk of the world production of springs produced here in Bristol and surrounding areas.

Late in the 1970's the lack of skilled help brought local springmakers together in order to develop a program to fill this ever-growing demand. In conjunction with Local and State Boards of Education, the first, full-scale springmaking school course known to exist, was established at Bristol Eastern High School.

The Springmaking Course at B. E. H. S. is designed to acquaint students with the three basic machines used in the spring trade: the coiler, torsion, and fourslide. After the basic principles are attained, the student then proceeds to advance to specialization on one of the three machines.

Having successfully completed the course, the student is then given the opportunity to apply his newly-attained skills in one of the many springshops in the area. If satisfactory achievement is accomplished in on-the-job training, the student is given the opportunity for full-time employment.

Students should see their Guidance Counselors or Springmaking Instructor for further details.

Examples of Job Placement:

- Coiler Set-Up
- Torsion Set-Up
- Fourslide Set-Up
- Fourslide Tool & Diemaker
- Tool Design
- Secondary Set-Up
- Inspection

Other Bristol Occupational Training Programs ...

1. Health Occupations
2. Office Education
3. Data Processing

DISTRIBUTIVE EDUCATION

"Developing Future Leaders in Marketing, Management, and Merchandising"

Distributive Education (DE) is a two-year program offered to students in the 11th and 12th grades. DE provides instruction in distribution and marketing of goods and services. Students must show interest in a distributive occupational field.

Juniors: Distributive Education I
School Store Operation
DECA*

Seniors: Pre-requisite: (D.E. I)
Distributive Education II
Related Work Experience
(Supervised on-the-job training, with pay, and early dismissal.)
DECA*

Distributive Education prepares students for career opportunities in the following areas:

Retailing	Supermarkets
Department Stores	Advertising
Specialty Stores	Display
Hardward Stores	Sales
Hotels	Insurance
Oil Industry	Transportation
Wholesaling	Banks, and more ...

AFTER GRADUATION

WORK: Students may obtain an occupation in one of the areas above, using the skills obtained in the DE program.

COLLEGE: Students may continue their education in the field of fashion, marketing, advertising, business, or teaching DE, in either a two - or - four - year college.

*DECA: Distributive Education Clubs of America, identifies a National Youth Organization.

Attachment L1

BRISTOL
OCCUPATIONAL EDUCATION

PREPARING FOR THE
WORLD OF WORK

The Bristol Career Education Program is dedicated to the realization of the following goals throughout its K-12 Program.

K-6 GOALS *

1—Awareness of self and development of concepts related to self.

2—Awareness of different types of occupational roles.

3—Awareness of individual responsibility for own actions.

4—Development and application of the rudiments of classification and decision-making skills.

5—Learning cooperative social behavior.

6—Development of respect for others and the work that they do.

7—Development of work attitudes and values.

7—8 GOALS

1—Clarification of ones own value system.

2—Refinement of decision making skills.

3—Awareness of different careers available in the world of work through exploratory programs.

9—12 GOALS

1—To provide each student with opportunities regardless of his ultimate career goals, to have marketable skills that will enable him to enter the labor force should the need or desire arise for him to do so.

2—To enable each student who desired to undertake advanced preparation, whether it be in a post-secondary technical school, college, university or business school to be so equipped with the necessary prerequisites to understand this advanced training.

3—To provide opportunities for students to participate in a meaningful occupational exploration.

4—To provide greater encouragement for student enrollment in vocational education programs.

5—To provide greater encouragement for student enrollment in work experience programs, and a wide range of work experience.

6—To provide intensive guidance and counseling in preparation for employment and/or future education.

7—To develop career information programs to be carried out by departments within the scope of the curriculum.

8—To establish a continuing avenue of communications between school, business, industry and community.

9—To follow-up all drop-outs and graduates and to use such data in the planning of future programs.

10—To provide a Career Placement Service to terminating secondary students (whether graduating or withdrawing) of the Bristol Public and Non-Public High Schools.

*Bailey & Stadt - Career Education
McKnight Publishing Company. 1973

BRISTOL CAREER EDUCATION PROGRAM
Mr. Robert Edmondson, Director

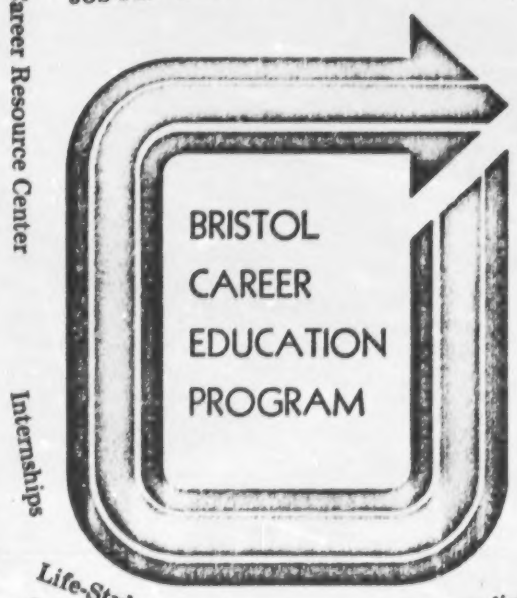
STAFF

Miss Kathy Quinn
Bristol Eastern High School
Mr. Ed Phelan
Bristol Central High School
Mr. Dave Doherty
St. Paul Catholic High School
Mr. Richard Matt
Resource Center
Mr. Frank Dolce
Elementary Awareness
Mr. Angelo Llopis
Junior High School Specialist

THE BRISTOL CAREER EDUCATION PROGRAM is an Exemplary Project in Vocation Education Conducted Under Part D of Public Law 90-576.

The brochure was performed pursuant to a grant from the U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

A MODEL FOR GRADES K-12



THE LINK BETWEEN THE WORLD OF EDUCATION AND THE WORLD OF WORK.

BRISTOL CAREER EDUCATION JOB PLACEMENT SERVICE

Provides

A SERVICE FOR BOTH STUDENTS and EMPLOYERS

WHAT IS IT ?

A program of the Bristol Career Education Department, the purpose of which is to offer job opportunities to students through a system that allows clear and precise communication between employers, students, and concerned education officials.

FOR WHOM ?

Terminating Secondary students (whether graduating or withdrawing) of the Bristol Public and Non-Public High Schools.

We will try to fill any opening that the employer may have.

WHAT HAPPENS?

The Bristol Career Education Program works to help students acquire job seeking and job keeping skills. A prospective employer needs to make only one telephone call (to the Bristol Career Education Center) to place a job order. It is the Career Education's staff's responsibility to match prospective employees with suitable employers.

HOW TO USE THE SERVICE

STUDENTS

After involvement in the Job Seeking/ Job Keeping Seminar indicate your willingness to become involved on the survey presented to you. Or else, contact the Career Education Specialist in your guidance department.

MR. EMPLOYER . . .

CALL 589-1028

The placement coordinator will take your job order on the phone or will visit you personally if you wish.

Remember only one telephone call, makes students from three high schools available to you.

All job orders are CONFIDENTIAL.

Only qualified students will be referred to you.

Selection and matching of students with employers requests will be provided by the following:

Bristol Eastern High School
Guidance Department
Mr. Richard Lehmert, Director

Bristol Central High School
Guidance Department
Mr. John Harrison, Director

St. Paul Catholic High School
Guidance Department
Mr. John Marr, Director

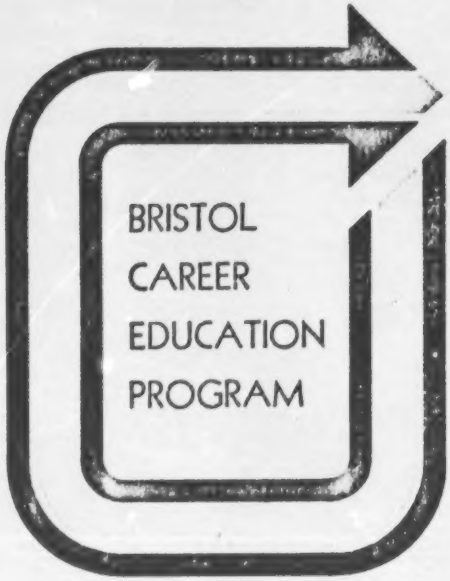
Bristol Career Education Program
Mr. Robert Edmondson, Director
Placement Staff:
Miss Kathy Quinn
Mr. Ed Phelan
Mr. Dave Doherty
Mr. Richard Matt
Mrs. Joan Atkinson

THE BRISTOL CAREER EDUCATION PROGRAM is an Exemplary Project in Vocation Education Conducted Under Part D of Public Law 90-576.

This brochure was performed pursuant to a grant from the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

JOB

PLACEMENT SERVICE



Employers and Educators Working Together To Keep Bristol Youth In Connecticut

WHO IS THE RESOURCE CENTER FOR ?

The center is for you. It serves all Bristol teachers and school administrators.

WHAT WILL I FIND IN THE CENTER?

The center contains a variety of career oriented materials and offers a wide range of services to teachers and the career education staff, such as:

1. A portable video system for record-career education activities.

2. The S. R. A. Career Information Kit, which contains over 1000 pieces of literature on specific careers.

3. Booklets, pamphlets, etc. related to careers in all of the U. S. O. E. 's fifteen occupational clusters.

4. Statistics and other information about the labor market for both the entire state of Connecticut and the Hartford area.

5. Filmstrip-cassette kits related to all phases of career education.

6. Facilities for previewing both our own materials as well as those obtained from vendors specifically for preview purposes.

7. An in-service workshop area. (Let us know your needs. In-service activities can be organized around whatever will help you to implement career education in your classroom.)

8. An extensive file on commercially available materials from practically every vendor in the career education field. (Your help is needed here. Most materials can be obtained for previewing. Your evaluation would help us to plan our purchases.)

9. Several series of books about specific careers which can be used by individual students or for class projects.

10. The resource center maintains subscriptions to several periodicals related to career education. These are always on hand and they can be very useful and informative for both you and your students.

11. The center also has information on such topics as career education programs in other towns and states; testing; free-loan and rental films; and preparation of audiovisual media for career education.

The Career Education Resource Center is open on school days from 8:30 a.m. to 4 p.m. Stop in and look around. Maybe we can help!

(Address and telephone number below)

Bristol Career Education Program
Mr. Robert Edmondson, Director

Staff
Miss Kathy Quinn
Mr. Ed Phelan
Mr. Dave Doherty
Mr. Richard Matt
Mr. Frank Dolce
Mr. Angelo Llopis

THE BRISTOL CAREER EDUCATION PROGRAM is an Exemplary Project in Vocation Education Conducted Under Part D of Public Law 90-576.

The brochure was performed pursuant to a grant from the U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

ROOM 113
BRISTOL EASTERN HIGH SCHOOL
632 King Street
Bristol, Connecticut 06010
Telephone (203) 583-2790

CAREER

RESOURCE CENTER

BRISTOL
CAREER
EDUCATION
PROGRAM

Richard J. Matt, Director

Serving the Educational Community

E. C. Goodwin Satellite

AT

BRISTOL, CONNECTICUT

CONNECTICUT STATE DEPARTMENT OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
HARTFORD, CONNECTICUT

BRISTOL

SUMMARY OF THE E. C. GOODWIN VOCATIONAL-TECHNICAL SCHOOL
Satellite Program: Bristol

The Program will consist of five courses designed to provide skills to 11th and 12th grade students in the following occupations:

1. Construction
2. Electro-Mechanical
3. Machine-Tool
4. Pipe Trades
5. Heating-Air conditioning

The Satellite is scheduled to open September 2, 1975. The main objective of the Satellite is to enable the students to leave the satellite equipped with sufficient skills to meet changing labor market demands. The courses are organized around the cluster concept and in modules of 20 to 150 hours. The major emphasis is on skills which can be applied to a variety of occupations. The vehicles for delivery of instruction will be of such a nature as to permit the student to master fundamental skills applicable to more than one occupation.

Although the program will take an approach somewhat different from that of the parent school, it will not be of lesser quality. In addition to the appointment of qualified vocational instructors for the satellite and whenever it will profit the students, there will be a free exchange of students and instructors between E. C. Goodwin

Technical and the satellite. In case of special skill requirements, part-time instructors will be brought in to supplement the regular teaching staff.

The guidance departments in the Bristol area will work cooperatively with the E. C. Goodwin Technical School guidance personnel to enroll students in the program and to assist them in any way that may be necessary to prepare them for the world of work.

The Industrial Arts departments of the participating local high schools will in a special way play an important role in the satellite.

For example, all students in the satellite need blueprint reading, the Industrial Arts departments could teach this subject through the medium of drafting.

Industrial Arts departments may also provide the students with opportunities to explore different occupations so that they may be better prepared to select an occupation at the Satellite.

Appropriate occupational information (theory) will be taught at the Satellite.

The student may be provided an opportunity to study across clusters in the event he needs special skills found in specific modules.

Cluster I - Heating and Cooling	Cluster II-Manufacturing
Sheet Metal	Machine-Tool
Heating-Air Conditioning	Inspection
Welding	Screw Machine
	Spring Making

Cluster III-Construction

Carpentry

Remodeling

Tile Work

Trim Work

Cluster IV-Piping

Pipe Work

Steamfitting

Plant Maintenance

Cluster V-Electro-Mechanical

T. V. Repair

Business Machine Repair

Instrument Repair

Appliance Repair

CONSTRUCTION SERVICES

Objectives:

1. Each student will be able to perform tasks in the construction industry with hand and electrical tools as well as with the machinery of the construction occupations.
2. Each student will develop sufficient job entry skills in the construction occupations to prepare him for enrollment in advanced apprentice programs.
3. Each student will be skilled in the application of arithmetic, theory and blueprint reading to jobs in the construction occupations.
4. The students will perform all tasks with special emphasis on safety to persons and equipment.

VEHICLES FOR INSTRUCTIONS:

The construction occupations will concentrate on remodeling interiors and exteriors of buildings, and will include cabinet work.

The remodeling will entail every phase of con truction including tile work (ceramic and plastic), painting, paperhanging, formica work, etc. In effect, the students will be able to complete all phases of construction projects assigned to him.

Should the student desire to specialize in heavy construction he may transfer to E. C. Goodwin Technical School.

Wherever possible, these experiences will be acquired on real jobs.

INSTRUCTIONAL MODULES:

Because the students will be doing real work, instruction will cut across all modules. However, each student will be provided opportunity to specialize in modules of his choice. Any module may be taught during a semester.

Module I - Framing

Module II- Roofing

Module III-Paneling

Module IV - Trim

Module V - Millwork

Module VI - Tile Work

Module VII- Painting and Paperhanging

ELECTRO-MECHANICAL:

Objectives:

1. To provide the students with skills that will enable them to trace, repair and troubleshoot electrical circuits and their components.

2. To provide the students with skills that will enable them to assemble and disassemble a variety of mechanical devices.
3. To provide the students with electronic skills which will enable them to embark on a career in communications.
4. To provide the students with the cognitive skills required to solve mathematical problems and to read and interpret manufacturers' specifications.
5. To provide students with skills which will enable them to perform a variety of tasks with hand and power tools.
6. To apply all of these skills with special emphasis on safe practices to protect personnel as well as equipment.

VEHICLES FOR INSTRUCTION:

The students will gain skills and experiences through the repair of electrical appliances such as washing machines, unit air conditioners, electric stoves, typewriters, tape recorders with a potential for television and communication equipment repair.

The program will concentrate on fundamental electronic circuits and mechanical devices such as linkages, levers, gears, etc. These basic skills will be applied to job opportunities in sales, repair, installation and the production of electro-mechanical devices.

INSTRUCTIONAL MODULES

Because the students will be doing real work instruction will cut across all modules. However, each student will be provided with the opportunity to specialize in modules of his choice. Any module specialization may be taught during a semester.

Module I - Electrical Circuits

Module II - Electric Motors and Controls

Module III- Mechanisms and Pumps

Module IV - Instruments (Measuring)

Module V - Sheet Metal and Housings

Module VI - Couplings and Transmissions

Module VII- Assembly and Disassembly

Module VIII- Power Tools

HEATING AND COOLING

Objectives:

1. To provide the student with sufficient skills to enable him to gain entry into the heating and cooling occupations.
2. To provide the student with skills in sheet metal fabrication and layout.
3. To provide the student with entry skills in brazing, gas and electric welding.
4. The student will be instructed to perform all tasks safely.

VEHICLES FOR INSTRUCTION:

The students will meet the course objectives through real jobs in the community. They will install furnaces, air-conditioning systems including the required sheet metal work and welding. If the student chooses he may elect to specialize in any of the modules described below.

Module I - Heating Systems

Module II- Cooling Systems

Module III - Sheet Metal Layout and Fabrication

Module IV - Gas Welding and Burning

Module V - Electric Welding

MACHINE-TOOL

Objectives:

1. To provide the students with entry skills in the operation and set up of machine tools.
2. To provide the students with skills which will enable them to read blueprints, set up and operate lathes, millers, grinders, and other specialized equipment.
3. To provide the students with skills which will enable them to inspect and measure machine parts.
4. To enable the students to apply mathematics, blueprint reading skills and occupational information to diversified areas of the metal working industry.

VEHICLES FOR INSTRUCTION:

The student will learn machine-tool skills through the medium of production work contracted for/with local industry. He will, with cooperation from local industry, participate in work study programs for the purpose of developing special skills.

INSTRUCTIONAL MODULES

Module I - Lathe

Module II - Millers

Module III- Grinders

Module IV - Screw Machine

Module V - Spring Making

Module VI - Inspection

PIPE TRADES

Objectives:

1. To provide students with entry skills for careers in diversified areas of the pipe occupations.
2. To provide students with skills with which they will be able to cut and join copper tubing, cast iron steel, plastic and glass pipe.
3. To provide the student with skills which will enable him to apply arithmetic, blueprint reading and technical information to piping occupations.

VEHICLES FOR INSTRUCTION

The students will be provided opportunities to work on real contract jobs within the community and industry. He will work on steam, hot water and cooling systems, piping under the supervision of a licensed instructor. He will also have the option of arrangements, he can be made to learn skills through the work study program.

Module I - Cast Iron and Steel Pipe

Module II- Copper Tubing

Module III-Gas Welding

Module IV- Electric Welding

Module V - Pumps

RELATED SUBJECTS ALL OCCUPATION

Blueprint Reading and Sketching

1. View placement
2. Dimensioning
3. Hidden lines

4. Circles and arcs
5. Sections
6. Working drawings
7. Sketching
8. Estimating
9. Parts manuals
10. Manufacturers' specifications
11. Wiring diagrams
12. Exploded views
13. Hydraulic systems

MATHEMATICS

1. Whole numbers
2. Fractions
3. Decimals
4. Measurement (metrics included)
5. Percentages
6. Ratio and proportion
7. Mensuration
8. Graphs and tables
9. Formulas